

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE 22 MAY 1997		3. REPORT TYPE AND DATES COVERED MONOGRAPH	
4. TITLE AND SUBTITLE CAMPAIGN PLANNING: A DOCTRINAL ASSESSMENT THROUGH THE STUDY OF THE JAPANESE CAMPAIGN OF 1942				5. FUNDING NUMBERS	
6. AUTHOR(S) MAJOR JAMES L. BOILING					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) School of Advanced Military Studies Command and General Staff College Fort Leavenworth, Kansas 66027				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) Command and General Staff College Fort Leavenworth, Kansas 66027				10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES					
12a. DISTRIBUTION / AVAILABILITY STATEMENT APPROVED FOR PUBLIC RELEASE: DISTRIBUTION UNLIMITED.				12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) SEE ATTACHED					
14. SUBJECT TERMS CAMPAIGN, PLANNING, JAPANESE, PACIFIC, MIDWAY, DOCTRINE				15. NUMBER OF PAGES 62	
				16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UNLIMITED		

19971106 131

CAMPAIGN PLANNING: A DOCTRINAL ASSESSMENT THROUGH THE STUDY OF THE JAPANESE CAMPAIGN OF 1942

**A MONOGRAPH
BY
Major James L. Boling
Armor**



**School of Advanced Military Studies
United States Army Command and General Staff
College
Fort Leavenworth, Kansas**

SECOND TERM AY 96-97

Approved for Public Release Distribution is Unlimited

DTIC QUALITY INSPECTED 6

SCHOOL OF ADVANCED MILITARY STUDIES

MONOGRAPH APPROVAL

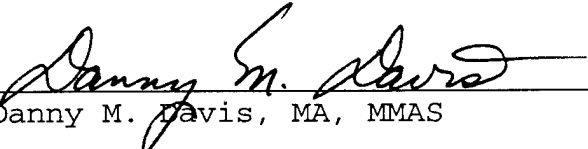
Major James L. Boling

Title of Monograph: *Campaign Planning: A Doctrinal Assessment
Through the Study of the Japanese Campaign
of 1942*

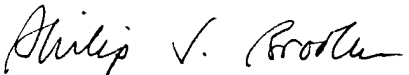
Approved by:



Robert H. Berlin, Ph.D. Monograph Director



COL Danny M. Davis, MA, MMAS Director, School of
Advanced Military
Studies



Philip J. Brookes, Ph.D. Director, Graduate
Degree Program

Accepted this 22d Day of May 1997

Campaign Planning:
A Doctrinal Assessment Through the Study of the
Japanese Campaign of 1942

by

Major James L. Boling
Armor

School of Advanced Military Studies
US Army Command and General Staff College
Fort Leavenworth, Kansas

April 18th, 1997

Approved for public release, distribution is unlimited

ABSTRACT

CAMPAIGN PLANNING: A DOCTRINAL ASSESSMENT THROUGH THE STUDY OF THE JAPANESE CAMPAIGN OF 1942

by Major James L. Boling, Armor, USA.

This monograph assesses the adequacy of current United States joint campaign planning doctrine within the context of conventional operations between similar forces within a theater of war. The study focuses on five key doctrinal planning concepts -- center of gravity, decisive points, operational reach, balance, and branches and sequels.

Joint planning doctrine directly influences the national security of the United States. The foundation of effective and rigorous military planning is the body of professional doctrine that shapes and animates the planning process. The use of poor or insufficient planning doctrine may result in flawed campaign plans which unnecessarily risk the resources and prestige of the United States as well as the lives of America's servicemen and women. Successful campaigns, developed from intellectually sound and militarily thorough planning doctrine, are the building blocks of national victory in war.

A case study of Japanese campaign planning efforts at the beginning of 1942 and the retroactive application of selected joint doctrine planning concepts to these efforts is the method and medium of inquiry. Japanese operational planning in 1942 contained a number of complex and difficult challenges. These challenges present a rigorous test for current doctrine. Historically, this process resulted in the disastrous attempt to invade Midway Island. Joint doctrine is assessed as adequate if its application to 1942 Japanese planning would have resulted in the development of a campaign plan potentially more successful than the historical Midway operation.

This paper concludes that the rigorous application of current joint doctrine by the Japanese to the planning for the 1942 campaign would have resulted in the production of a more thorough, resilient, and potentially more successful plan. Joint campaign planning doctrine, a way to think about warfare, would have overcome the challenges involved in planning this campaign.

Carried forward to our own era, this conclusion clearly indicates the adequacy of the doctrine for joint conventional campaign planning. Joint doctrine provides a sufficient conceptual framework for the design of war-winning conventional campaigns. When artfully and rigorously applied, the plans developed from this doctrine will continue to maximize and focus the United States' military might in the pursuit and defense of American national security into the 21st century.

TABLE OF CONTENTS

FORWARD	1
INTRODUCTION	4
SECTION I: CAMPAIGN PLANNING DOCTRINE	9
Overview	9
Center of Gravity	10
Decisive Points	11
Operational Reach	12
Balance	13
Branches and Sequels	14
A Summary of Planning Concepts	15
SECTION II: THE RISING SUN's PACIFIC WAR -- 1942	16
Strategic Prelude	16
Strategic Dilemma	17
Strategic Decision	18
Combine Fleet Operational Planning	22
The Midway Operational Plan	25
SECTION III: CONSIDERING A JAPANESE JOINT DOCTRINE	29
Center of Gravity	29
Decisive Points	30
Operational Reach	31
Balance	32
Branches and Sequels	34
SECTION IV: CONCLUSIONS AND ASSESSMENT	36
Relevance and Method	36
Japanese Plans and Joint Doctrine	37
Joint Doctrine Assessed	38
MAP 1 The Pacific Ocean Area - 1942	40
CHARTs, Combined Fleet Task Organization	41-42
ENDNOTES	43
BIBLIOGRAPHY	59

“I remind you that you have beaten most of the enemy’s fleet already; and, once defeated, men do not meet the same dangers with their old spirit.”

Phormio¹

“The finest theories and most minute plans often crumble. Complex systems fall by the wayside. Parade ground formations disappear. Our splendidly trained leaders vanish. The good men which we had at the beginning are gone. The raw truth is before us.”

GEN William O’Daniel, USA²

FORWARD: CENTRAL PACIFIC, JUNE 5th, 1942³

Aboard the battleship *Yamato*
IJN Combined Fleet Flagship
400 Miles Northwest of Midway Island

A terse coded message from the CinC Combined Fleet, Admiral Isoroku Yamamoto, was issued at 0225. Deployed across the width and length of the northern and central Pacific, individual ship captains and task force commanders of the Imperial Japanese Navy read their orders in disbelief and anguish...

- (1) The Midway Operation is canceled.
- (2) The Main Body will assemble the Midway Invasion Force and the First Carrier Striking Force (less *Hiryu* and her escorts), and the combined fleet will carryout refueling during the morning of 6 June at position 33 Deg N, 170 Deg E.
- (3) The Screening Force, *Hiryu* and her escorts, and *Nisshin* will proceed to the above position.
- (4) The Transport Group will proceed westward out of range of Midway-based planes.

This was a shocking pronouncement of the collapse of Japan’s greatest naval offensive of the Pacific War. The IJN had sortied the mightiest fleet of warships in its history for this

operation. 200 ships sailed from home waters and from the southern fleet anchorages in the Marianas, including eleven battleships, twenty-two cruisers, eight aircraft carriers, and 700 combat aircraft and seasoned expert pilots. This armada was organized into six great task forces and was commanded personally by the Combined Fleet CinC Admiral Yamamoto embarked on the world's most powerful warship, the *Yamato*. The fleet had steamed 2,500 miles to reach Midway, an isolated speck of sandy coral-fringed atoll 1,150 miles from Pearl Harbor at the extreme northwestern extension of the Hawaiian Chain.⁴

Here in this virtually empty quarter of the central Pacific, Japan had sought the longed for grand fleet battle which would decide the war. None had doubted the outcome of this meeting with the arch rival US Navy. After the enemy's mauling at Pearl Harbor and the Coral Sea, how could the US Navy's shattered remnants hope to stand against the power of the Imperial Japanese Navy? Victory seemed simply a matter of time and opportunity.⁵

Now what had begun so expectantly less than 48 hours ago lay in ruins⁶. Airfields on Midway and their aircraft were damaged but operational and the US Navy now had a powerful force, including two to four fleet carriers, concentrated somewhere northeast of Midway. Meanwhile, Japanese losses were staggering. Four first-line carriers and a heavy cruiser were sunk or sinking, a second heavy cruiser and two destroyers damaged, 234 combat aircraft and irreplaceable pilots lost, and 2,200 crewmen killed. While the striking power and morale of the Combined Fleet were being sent to the

bottom, and with them the Japanese initiative in the Pacific, Yamamoto and his staff had remained isolated and impotent aboard the *Yamato* hundreds of miles from the action.

Now fully aware of the magnitude of the disaster, the frustrated staff officers were anxious to avenge their humiliation. Several fantastic, almost suicidal, schemes were proposed for continuing the action and rescuing at least some degree of honor from the ashes. These were curtly vetoed by Yamamoto's ruthlessly pragmatic Chief of Staff, Admiral Ugaki.⁷

One officer was overcome by the pain of having to admit catastrophe. He protested with Ugaki, "But how can we apologize to His Majesty for this defeat?" Admiral Yamamoto, previously silent and withdrawn during these emotional staff debates, roused himself and flatly stated, "Leave that to me. I am the only one who must apologize to His Majesty."⁸

With this admission of failure the Battle of Midway truly ended. However, the controversy surrounding it had just begun. In the 55 years which have followed, writers both expert and amateur have offered various explanations for Japan's defeat. Misguided intelligence, bad luck, outmoded battle concepts, friction within the high command, professional arrogance, faulty command and control, poor leadership, flawed reconnaissance -- all were put forward either alone or in combination to reconcile potential with performance. However, the real reason for the Japanese failure at Midway, while it embraces all these, is also greater than their sum. The roots of the Imperial Japanese Navy's failure lie in poorly orchestrated and executed campaign planning.

“Planning is everything -- Plans are nothing.”

Field Marshal Helmuth Graf von Moltke⁹

“During a campaign, whatever is not profoundly considered in all its details is without result. In war nothing is achieved except by calculation.”

Napoleon¹⁰

INTRODUCTION

Napoleon’s military operations are legendary. His mastery of combined arms 19th century warfare, combined with his consummate generalship, crafted some of the greatest campaigns in history. The design and execution of these campaigns have provided a foundation for the study of war well into the 20th century. Although Napoleon never committed his planning framework to paper, the record of his campaigns seemed to indicate a general pattern of operational concepts.¹¹ Beginning in the early 1800s, military writers began attempts to distill and present Napoleon’s conceptual framework for campaign planning. Perhaps the most famous of Napoleon’s interpreters was Major-General Carl von Clausewitz.

Clausewitz's eternal legacy to military theory is his profound and enduring study, *On War*. Today, *On War*, is the acknowledged theoretical and doctrinal foundation of modern Western armies. In his critical examination of Napoleon’s warfighting concepts and techniques, Clausewitz illustrated the vital linkage between war’s political objectives and its design and execution.¹² The medium for this political to military link was the “plan of campaign.” The campaign plan represented the highest stratum of military

planning where the nation's political goals were translated into deliberate military actions centered on achieving these goals by force.

In analyzing 19th century campaign planning, Clausewitz relied heavily on the concept of the "military genius" whose talent, character, and perspicuous mental quality of *coup d'oeil* focused and animated the planning process. Clausewitz's prototypical model for such a genius was Napoleon himself.¹³ Although Clausewitz clearly assigned Napoleon's effortless genius a central role in successful campaign planning, Napoleon was actually a meticulous, thorough, and detailed planner.¹⁴ While Clausewitz stressed the importance of intuitive military genius, he also described a more methodical intellectual process for campaign planning independent of genius.¹⁵ Remarking that strategic theory was planning, Clausewitz wrote:

The [planner] must therefore define an aim for the entire operational side of the war that will be in accordance with its purpose. In other words, he will draft the plan of the war...he will, in fact., shape the individual campaigns...¹⁶

The ability of planners to develop a plan which shapes the campaign through the application of a disciplined intellectual process, without the benefit of genius, is the heart of modern campaign planning doctrine.

Military doctrine is a descriptive body of generally accepted practices that guide and enhance the uniformity of the actions of the members of the military profession.¹⁷ In this regard, sound and universally understood doctrine is a critical prerequisite to efficient and effective campaign planning. Chairman of the Joint Chiefs of Staff GEN John M. Shalikashvili alluded to the importance of campaign planning in his 1995 introduction to Joint Publication 5-0 *Doctrine for Planning Joint Operations*, writing "Diverse threats to

our national interests frequently require large, complex operations. The more complex the operation, the more comprehensive the planning must be to ensure success.”¹⁸

“A campaign plan describes how a series of joint major operations are arranged in time, space, and purpose to achieve a strategic objective.”¹⁹ Campaign plans are “the focus for the conduct of war”²⁰ because they “...[link] battles and engagements in an operational design to accomplish strategic objectives.”²¹

This series of theater-wide joint major operations that make up these wartime campaigns may cover enormous areas and involve huge quantities of men and material. A brief consideration of Philippine or Normandy Campaigns of World War II or, more recently, Operations DESERT SHIELD and DESERT STORM give a general indication of the magnitude of the military and national effort which campaigning can require. Consequently, the stakes and the investment in such campaigns are high. Successful campaigns are the building blocks of national victory in war. Unsuccessful campaigns can lead to national defeat.

The size, duration, and consequences of campaigns demands a comprehensive and rigorous planning process. Military doctrine codifies this process and provides the medium for its instruction, application, and assessment. While victory is not guaranteed by good planning, defeat is frequently the result of poor planning. A military unprepared or ill-equipped by doctrine to plan conventional campaigns is significantly handicapped in attempting to fulfill its responsibility to fight and win its nation’s wars.²²

The United States military has a doctrine for joint conventional campaign planning. This body of doctrine consists of Joint Publications 3-0 *Doctrine for Joint*

*Operations, 5-0 Doctrine for Planning Joint Operations, and 5-00.1 Doctrine for Joint Campaign Planning.*²³ Critics of this doctrine have argued that it does not provide a sufficient conceptual framework for planning war-winning conventional campaigns. In today's post Cold War strategic environment the United States exists as the only global military superpower. This dominance is unlikely to last forever. The future security environment may not be nearly so benign nor the position of the United States so superior. The future emergence of a hostile and aggressive peer competitor could easily endanger United States national interests. A military component of the response to such a threat would demand a great deal of expertise in the design of conventional military campaigns. Inadequate planning doctrine may jeopardize the success of future military operations by denying inexperienced planners the conceptual framework they need to develop comprehensive and effective campaign plans.

This paper examines the adequacy of current joint campaign planning doctrine within the context of conventional operations between similar forces within a theater of war. A comprehensive treatment of this admittedly broad area of inquiry would quickly exceed the scope of this paper. Therefore, this study focuses on five key doctrinal planning concepts -- center of gravity, decisive points, operational reach, balance, and branches and sequels.²⁴

This study's methodology retroactively applies present United States doctrine to a case study of Japanese campaign planning efforts at the beginning of 1942. This case contained a number of complex and difficult challenges for Japanese operational planners. These challenges present a rigorous test for current doctrine. Historically, this

process resulted in the disastrous attempt to invade Midway Island. This paper will consider joint doctrine adequate if its application to 1942 Japanese planning would have resulted in the development of a campaign plan potentially more successful than the historical Midway operation.

The body of this paper is organized into four sections. Section I begins with a doctrinal review and analysis of the key planning concepts selected for examination. Section II introduces and explores the Japanese strategic and operational situation in 1942 as the paper's case study. Section III follows with a analysis and commentary on the application of the selected doctrinal planning concepts to the case study. Finally, section IV provides conclusions based on material presented in previous sections.

“A doctrine of war consists first in a common way of objectively approaching the subject; second, in a common way of handling it, by adapting without reserve the means to the goal aimed at, to the object.”

Marshal Ferdinand Foch²⁵

“Doctrine is indispensable to an army. Doctrine provides a military organization with a common philosophy, a common language, a common purpose, and a unity of effort.”

GEN George H. Decker, USA²⁶

SECTION I: CAMPAIGN PLANNING DOCTRINE

OVERVIEW

The operational level of war encompasses those activities that connect tactical “means” to strategic “ends.” The operational level is then the “ways” of warfare in the ends - ways - means trilogy. At the operational level of war “...campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or areas of operations.”²⁷ The campaign plan is the “...plan for a series of related military operations aimed at accomplishing strategic or operational objectives within a given time and space.”²⁸ It describes how these operations are connected in time, space, and purpose.”²⁹

Campaign plans are broad, general rather than specific, sensitive to strategic and tactical realities, and forward thinking with regard to time, space, and forces. In this respect they are, naturally, quite different from the tactical plans they precipitate. Consequently, doctrine for the operational level of war is distinct from that for the tactical level. The focus of tactical doctrine is specifying “how” to do things. Operational

doctrine is focused on “what” to accomplish and “why,” described in terms of the characteristics of sound operations. As joint doctrine admits, “Campaign planning is as much a way of thinking about warfare as it is a type of planning.”³⁰ For these reasons, joint doctrine is peppered with lists of concepts without a great deal of practical guidance on their application.³¹ Such lists form the core of joint doctrine for campaign planning in joint publications; 3-0 *Doctrine for Joint Operations*, 5-0 *Doctrine for Planning Joint Operations*, and 5-00.1 *Doctrine for Joint Campaign Planning*. The planning concepts which are the focus of this study, center of gravity, decisive points, operational reach, balance, and branches and sequels, were selected from these publications.

CENTER OF GRAVITY

Center of gravity is probably the most common and the most debated doctrinal concept. The origins of the center of gravity concept are found in Clausewitz’s *On War*. In explaining this then new term, Clausewitz wrote:

...out of the dominant characteristics of both belligerents...a certain center of gravity develops, the hub of all power and movement on which everything depends. That is the point against which all our energies should be directed.³²

[A center of gravity] presents the most effective target for a blow; furthermore, the heaviest blow is that struck by the center of gravity.³³

Clausewitz stated that it was major act of strategic judgment to identify these enemy centers of gravity and determine methods to strike them.

Clausewitz’s concept of center of gravity has evolved within military doctrine to keep pace with the mass armies and technological advances in the intervening 150 years since its development. Joint doctrine defines center of gravity as “those characteristics, capabilities, or localities from which a military force derives its freedom of action,

physical strength, or will to fight.”³⁴ Doctrinally, campaign plans “Identify the enemy strategic and operational centers of gravity and provide guidance for defeating them.”³⁵ Joint Pub 5-00.1 says of centers of gravity, “The essence of operational art is concentrating friendly military resources against the enemy’s main source of strengths (his center or centers of gravity).”³⁶ The most thorough doctrinal examination of centers of gravity is found in Joint Pub 3-0.³⁷ This manual develops the center of gravity concepts as an analytical tool to guide continuous analysis of enemy and friendly strengths and weaknesses. Joint Pub 3-0 also introduces the counterbalancing notion of operational protection of enemy centers of gravity forcing the adoption of indirect attack methods by friendly forces. However, it goes on to declare “...destruction or neutralization of enemy centers of gravity is the most direct path to victory.”³⁸

The center of gravity is clearly a keystone concept within current joint warfighting doctrine. It is a powerful analytical tool that also provides a sharp and consistent focus for planning and operations within the theater. Its correct and timely identification “...is critically important to establish clarity of purpose, to focus efforts, and, ultimately, to generate synergistic effects in the employment of one’s own friendly forces and assets.”³⁹ The center of gravity concept is closely linked to a second doctrinal planning element, the decisive point.

DECISIVE POINTS

Like the center of gravity, decisive points have their theoretical origin in the writings of a 19th century interpreter of Napoleon -- Baron General Antoine Jomini. In his *Summary of the Art of War*, Jomini identified the “decisive strategic point” as all

points “which are capable of exercising a marked influence either upon the result of the campaign or upon a single enterprise.”⁴⁰ Jomini’s concepts survive in a diluted and simplified form in joint doctrine as “decisive points” which doctrine defines as “[usually geographic points where]...a commander can gain a marked advantage over the enemy and greatly influence the outcome of an action.”⁴¹ Decisive points take on an added significance when centers of gravity are too well protected to be vulnerable to direct attack. Because of the future influence their possession gives the holder, doctrine sees decisive points as “...the keys to attacking protected centers of gravity.”⁴² Joint Pub 3-0 also assigns possession of initiative and freedom of maneuver to control of decisive points. Planners identify the most important decisive points as objectives and allocate resources to control, destroy, or neutralize them; in essence making them objectives.⁴³

The importance of decisive points can only be understood in the context of center of gravity. In fact, by following joint doctrine it becomes obvious that decisive points can only exist in relationship to an identified center of gravity. Decisive points impart influence to their possessor. Such influence only comes from effect on enemy actions resulting from threats to his center of gravity. Hence the doctrine’s emphasis on correctly identifying and monitoring enemy centers of gravity. The ability to employ forces against selected decisive points (objectives) in a function of operational reach.

OPERATIONAL REACH

Operational reach is a vital consideration in campaign planning. Much more so than in tactical operations, campaigns are simultaneously focused on and constrained by logistics considerations. Sustainment concepts are a fundamental element of campaign

plans.⁴⁴ The tempo, timing, duration, and intensity of operations are directly related to ability of the joint force to flow logistics commodities from their origins, through bases in the rear area, to forward locations and fighting units. While the term “operational sustainment” pertains to the logistics system itself, “operational reach” describes the effect of this system on operations.⁴⁵ Operational reach is “...the distance over which military power can be concentrated and employed decisively.”⁴⁶ It consists of pushing bases, logistics, reserves, and forces forward and enhancing transportation throughput along lines of communication.

“The essence of the campaign plan is the extension of the theater commander’s operational reach, while denying operational reach to the opponent.”⁴⁷ Therefore, the seizure or neutralization of decisive points which influence operational reach becomes a key component of the design of the campaign.

BALANCE

Although it is almost never addressed in professional journals or discussed in scholarly papers, balance is an important organizing concept for operational planning.

Balance is:

...the maintenance of the force, its capabilities, and its operations in such a manner as to contribute to freedom of action and responsiveness. Balance refers to the appropriate mix of forces and capabilities within the joint force as well as the nature and timing of operations conducted.⁴⁸

However, the importance of balance lies beyond what this simple definition suggests.

Doctrine places several key warfighting concepts under the heading of “balance.”

These concepts include disrupting enemy balance, agility of friendly forces, developing multiple execution options, designating priority efforts, and establishing command

relationships to enhance responsiveness. The idea of disrupting the enemy's balance is the most important of these concepts.

Friendly forces seek to maintain their own balance while disrupting the enemy's. This "flip side" to balance could be more properly considered as "equilibrium." Imposing disequilibrium on the enemy is one of the goals of the joint force. It is achieved through surprise strikes, pressing the fight "...deception, special operations, electronic warfare and deception, ... interdiction, maneuver, and [counter-reconnaissance which] all converge to confuse, demoralize, and destroy the opponent."⁴⁹ Doctrine's full explanation raises balance from relative obscurity to a central position in campaign planning.

BRANCHES AND SEQUELS

Although they are often said as if they were a single word, branches and sequels are two different planning concepts. Branches are "options built into the basic plan" while sequels are "subsequent operations based on the possible outcomes of the current operation -- victory, defeat, or stalemate."⁵⁰

Rigid plans are fragile plans. Under the pressure of chance and friction they rarely retain validity and coherence.⁵¹ The unpredictability of combat due to chance and friction, coupled with the longer planning horizon of the operational level, make branches a necessity in campaign planning. Branches attempt to answer the "what if" questions of execution by providing at least outline plans to capitalize on success and exploit fleeting battlefield opportunities. Branches are contingency plans to preserve freedom of action⁵² and "...add flexibility to plans by anticipating situations that could alter the basic plan."⁵³

The concept of branches also acts as a balance against erroneous assumptions. Assumptions are a vital component of campaign planning. In fact, the plan rests on its underlying assumptions. "Campaign planning...is based on evolving assumptions."⁵⁴ Development of branches may begin at the point where an assumption is questioned or changed. For example; a plan based on the assumption that the enemy will attack in the north develops a branch when the assumption is changed to "If the enemy attacks in the south..."

Sequels attempt to answer the "what next" outcome-based questions of operations. Within the campaign, phases are sequels based on a favorable, or at least the most likely, outcome of the subordinate units' preceding major operations. The completion of subordinate major operations often constitutes a phase of the campaign.⁵⁵ The vision the investigator and develops branches and sequels also precipitates planning to extend operational reach or enable operational maneuver in support of future operations.

A SUMMARY OF PLANNING CONCEPTS

This section briefly introduced and defined five doctrinal planning concepts -- center of gravity, decisive points, operational reach, balance, and branches and sequels. This section's discussion of these concepts investigated and explained their importance in providing an intellectual focus and practical touchstones for campaign design. This paper carries these planning concepts forward into the following sections to form the analytical framework for examining the Japanese campaign plans and planning that resulted in the Combined Fleet's disaster at Midway.

“The Commander in Chief of the Combined Fleet is to cooperate with the army in the occupation of Midway and strategic points west of the Aleutians.”

**From IJN Order No. 18
May 5th, 1942⁵⁶**

“It may be that the enemy’s fleet is still at sea, in which case it is the great objective, now as always.”

RADM Alfred Thayer Mahan, USN⁵⁷

SECTION II -- THE RISING SUN’S PACIFIC WAR 1941 - 1942

STRATEGIC PRELUDE⁵⁸

At the beginning of 1941, Japan was still mired in an interminable war with China which Japan had instigated some ten years previously. The same national sentiment of racial superiority, desire for great power status, and “manifest destiny” that had lead Japan into this war was now the same emotional tide that would not permit her to leave China except in triumph. As the war dragged on, Japan required ever increasing material resources to simultaneously fuel the war effort, continue the economic exploitation of the mainland, and pursue its aggressive military rearmament programs. With neither the temperament to withdraw from China, nor the resources necessary to win what was now an attrition war, Japan was stalemated.

The Japanese sought the solution to this problem by extorting resources, primarily metals and oil, from the weak colonial powers of France and the Netherlands who controlled the resource-rich areas of The Dutch East Indies and Indochina. This attempt took the form of the bellicose political bullying that was the hallmark of Japanese foreign

policy in Asia. France acquiesced. However, the Dutch not only refused, but in July of 1941, restricted oil imports to Japan and joined with the British, Chinese, and Americans in an economic coordination and cooperation group.

This group quickly acted to freeze Japanese assets abroad, tighten existing economic sanctions, and impose an oil embargo against Japan. The economic noose around Japan was complete. America demanded a halt to aggression and a withdrawal from China as the price of oil. America had now pushed Japan into a corner from which the only honorable escape was war. Japan would fight for the natural resources that would allow it to win the war in China and achieve the economic self-sufficiency necessary to thwart the economic blackmail of the United States. Japan went to war against the Allies in December, 1941.⁵⁹

STRATEGIC DILEMMA

In the first two months of 1942 the Japanese Empire was riding the high tide of an unbroken string of stunning victories. In the short space of a few months they had severely damaged the US Navy at Pearl Harbor and driven the Dutch and British out of the southeastern Pacific. They had conquered Malaya, Singapore, most of the Dutch East Indies, Indochina, Borneo, and Thailand and had forced the Americans into besieged enclaves in the Philippines. Naval forces had landed in the Gilbert Islands, and the Bismarck Archipelago and had bombed Australia. In Burma the army was pushing the British toward India. (See Map 1).⁶⁰ Even as the Japanese celebrated their impending victories in Southeast Asia, their surprisingly swift successes were precipitating a strategic decision making crisis.

The crisis involved what to do next. The present offensive would be completed in mid-March, which meant that the decision for the second phase of operations had to be reached by the end of February. As late as mid-January the Combined Fleet Chief of Staff was still wondering what the fleet's subsequent operations would be. Admiral Ugaki, Chief-of-Staff, Combined Fleet recorded in his diary; "Thursday, 1 January 1942. ...operations have been progressing smoothly and we have reason enough to hope for completion of the first stage of the war before the end of March. Then what will come next?"⁶¹

There were four offensive options available: south to invade Australia, southeast to isolate Australia by severing its lines of communication to Hawaii, west into the Indian Ocean to defeat the Royal Navy, or east into the central Pacific against the US Navy.⁶² Each option had various advocates within the navy, but the Imperial General Headquarters would ultimately make the decision. The Imperial General Headquarters contained the Army Section and the Naval General Staff. The rivalry between these two headquarters elements was bitter and long standing. This competition forced Japan to accept grudging army-navy compromises in lieu of a cohesive joint strategy.⁶³

STRATEGIC DECISION

The army's strategic focus was still oriented on China and the Soviet Union. Any navy-induced adventurism that looked to pull troops from either of these areas would not win army support. Accordingly, the army refused to support the Indian Ocean, southeastern, or Australian offensives. Since the army could not admit that it simply did not wish to provide the number of soldiers which these offensives would require, the

army justified its lack of support by citing strategic overextension in the face of diminishing logistics and support services.⁶⁴ The Naval General Staff, now aligned with the Army Section, proposed expanding an already approved limited operation in the Tulagi area into a full-blooded offensive through the Solomons and into Fiji and Samoa.⁶⁵ This was at cross purposes with the Combined Fleet's concept of an offensive into the central Pacific.

The central Pacific offensive was initially conceived as an attack and invasion of Hawaii itself. Revisions based on further staff estimates reduced the planned offensive's physical objective to Midway alone. However, its ultimate aim remained to draw the US Navy into a decisive fleet-to-fleet engagement.⁶⁶ Inter-staff rivalry, argument, and indecision permeated the ensuing Imperial strategic conferences.. The competing staff positions hardened and soon became deadlocked. This impasse was finally broken, not through careful analysis and deliberation, but through the arrogance and dominating personal power of Admiral Yamamoto.

During staff negotiations on the 5th of April, the Combined Fleet's representative, Commander Watanabe was shaken by the strength and clarity of the staffs' reasoning against an offensive into the central Pacific and in support of the Solomons operations. He telephoned Admiral Yamamoto for his response to these arguments. Admiral Yamamoto's reply was an adamant reiteration of his rationale behind the Midway plan.

In the last analysis , the success or failure of our entire strategy in the Pacific will be determined by whether or not we succeed in destroying the United States Fleet, more particularly its carrier task forces. The Naval General Staff advocates severing the supply line between the United States and Australia. It would seek to do this by placing certain areas under Japanese control, but the most effective and direct way achieve this objective is to destroy the enemy's carrier forces, without which the supply line could not in any case be maintained. We believe that by

launching the proposed operations against Midway, we can succeed in drawing out the enemy's carrier strength and destroying it in decisive battle. If, on the other hand, the enemy should avoid our challenge, we shall still realize an important gain by advancing our defensive perimeter to Midway and the western Aleutians without obstruction.⁶⁷

Admiral Yamamoto's refusal to even consider changes to the Combined Fleet plan or to entertain compromises was a clear signal of his intention to resign over the matter if it was not resolved in his favor.⁶⁸ In the face of Admiral Yamamoto's implied ultimatum the Naval General Staff reversed itself and declared for the Midway operation. The Imperial General Staff capitulated and authorized the Midway offensive.⁶⁹

Admiral Yamamoto's obstinate support of the Midway plan was a reflection of his mounting desperation to end the growing threat posed by the US Navy. The Pearl Harbor raid had achieved its operational objective in precluding American interference in Japanese operations in the Dutch East Indies and the Philippines in December, 1941. However, the US Navy remained a viable fighting force and Admiral Yamamoto was convinced that the US Navy's continuing naval building program, coupled with the industrial capacity of the United States, made the resurgence of the American navy in the central Pacific simply a matter of time. Japan's only hope of avoiding a protracted war which it could not win was to destroy the offensive power of the US Navy by eliminating its carrier task forces.⁷⁰ Admiral Yamamoto reasoned that only by destroying the United States carriers in a decisive battle precipitated by the Combined Fleet on its own terms could the Japanese navy maintain the marginal numerical superiority it enjoyed in 1942.⁷¹ A second factor that sustained Admiral Yamamoto's insistence on immediate action

against the US Navy were the operations of the Americans in the aftermath of Pearl Harbor.

During February and March, the US Navy had conducted minor carrier raids into the central and south Pacific. The raid on Marcus Island on March 4th occurred within the supposed Japanese defense perimeter envisioned by planners. This illustrated the vulnerability of Japan's open sea flank in the central Pacific and raised fears of US Navy carrier raids into Japan proper.⁷² These raids sharpened the Admiral Yamamoto's and the Combined Fleet's determination to defeat the US Navy and secure Japan from air attack.⁷³ Possession of Midway as a staging base for future operations against Hawaii and as an outpost for reconnaissance and early warning operations now took on additional importance in the eyes of the Combined Fleet staff.⁷⁴

Although the Imperial General Staff had approved the Midway operation, it continued to be treated with skepticism and strong opposition to the plan remained. Given sufficient time and if pressed with skill and vigor, these residual arguments may have convinced the Combined Fleet to accept modifications to their plans. However, the "Doolittle Raid" of 18 April terminated open opposition to the Midway offensive.⁷⁵

No one could argue with effect against [the Midway operation] after 18 April; the raid belatedly forced the bulk of the Imperial Navy, hitherto intoxicated by its own successes, to face up to the all-consuming need to move against the Americans. It was this almost frenzied determination to undertake [the Midway] offensive...that stifled so much of the opposition to the dubious aspects of [Midway].⁷⁶

Not only was external opposition muted, but possibility of beneficial professional critique from within the Combined Fleet's hierarchy was also curtailed.

The array of Combined Fleet senior leaders opposed to all at least some aspect of the Midway concept was formidable. No less than five flag-rank sea-going commanders who would be part of the operation had significant reservations about the preliminary Midway plan: Admiral Nagumo (Commander 1st Carrier Striking Force and Carrier Division One), Admiral Kusaka (Chief-of-Staff 1st Carrier Striking Force), Admiral Yamaguchi (Commander, Carrier Division Two), Admiral Kondo (Commander Midway Invasion Force), and Admiral Inoue (Commander, South Seas Force). The silence of these key leaders prevented the consolidation of an effective opposition group.⁷⁷

Such a group might have fostered an air of creative tension through the exchange and discussion of conflicting opinions, serving as “devil’s advocate” for the Combined Fleet planning staff. However, rather than seeking such a touchstone for their work, the staff exploited their insulation and, under both the pressure and the protection of Admirals Yamamoto and Ugaki, developed the Combined Fleet’s plan for Midway.

COMBINED FLEET OPERATIONAL PLANNING

The planning for Midway can be considered as two phases. The first phase began with Admiral Ugaki’s development of a conceptual course of action for an offensive in the central Pacific aimed at Hawaii in mid-January and ended with a fully matured concept for the Midway operation approved by the Imperial General Staff on the 5th of April. This strategic decision of the Imperial General Staff pushed planning into the second phase. The second phase was the Combined Fleet staff’s operational planning which refined the approved concept and drafted the campaign plan.⁷⁸

This refinement would be achieved through a series of tabletop maneuvers hosted by the Combined Fleet aboard the *Yamato* from the first through the fourth of May. This comprehensive wargame would cover the whole campaign and include the task force commanders and their staffs. Ideally, these wargames would provide an open forum for the professional exchange of ideas and a detailed critical examination of every facet of the plan against multiple enemy deployments and actions. A vital offshoot of wargaming would be the identification and subsequent development of branches and sequels to the plan.⁷⁹ However, in execution the wargaming of the Midway campaign fell far short of these goals and attributes.

Even before the wargames had officially opened, there was an aura of immutable predestination about the Midway plan within the Combined Fleet Headquarters. As a result, the exercises assumed a perfunctory “window dressing” atmosphere. Captain Fuchida observed:

Admiral Yamamoto, however, brushed aside Kondo’s objections with the assertion that the Midway plan had been agreed upon between Combined Fleet Headquarters and the Naval General Staff after careful study on both sides, and could not be changed. ... It was quite apparent that Combined Fleet Headquarters, regardless of all objections, had no intention of backing down from its decision to carry out the Midway operation. ... Combined Fleet was not in the mood to accept even minor changes.⁸⁰

The Combined Fleet’s attitude toward the wargames was matched in part by that of the commander and staff of the First Carrier Striking Force who treated the entire process with “bored indifference” and treated the results “casually.”⁸¹ The First Carrier Striking Force’s superficial treatment of potential critical decisions during the battle and failure to thoroughly consider the possible actions of an uncooperative US Navy skewed the

wargame results and detracted from their potential value as a medium to discover branches to the plan.

This cavalier approach was exacerbated by the conspicuous heavy-handed Japanese favoritism on the part of the exercise director and senior umpire -- Admiral Ugaki.⁸² Admiral Ugaki viewed the wargame from a prejudiced perspective founded on:

...a casual, sanguine assumption that any difficulty could be overcome without too much trouble, that everything would run with the smoothness of a well maintained watch.⁸³

He overrode rulings and results unfavorable to the Combined Fleet in order to ensure Japanese victory in every iteration; once even resurrecting a carrier previously ruled lost so that it could be used in a later battle.⁸⁴ Incredibly, no one appeared to be concerned with this pro-Japanese conduct of what was allegedly an impartial examination of the impending campaign.

Admiral Ugaki shared with many other senior officers a dogmatic mental model of the overwhelming superiority and invincibility of Japan's military forces. This uniquely Japanese psychological paradigm has been termed "victory disease" by post-war analysts. It was induced by the early easy victories won by the Japanese over ill-equipped or ill-prepared opponents. The self-conceit and arrogance of victory disease eroded the military rationality of its victims and blinded them to the realities of the evolving conflict in the Pacific. Admiral Ugaki's performance during the wargames was acute victory disease at its worst and most virulent.⁸⁵

In spite of the exercise's lack of intellectual rigor, its participants continually raised significant issues with the Combined Fleet staff and especially Admiral Ugaki. However, the wargames ended with few, if any, of these issues resolved.

The wargame had served to inform the various commands about their roles in the new campaign, but little else. The belated consultations, the casual disregard of the enemy's alternatives, and the deterministic wargaming methodology had chafed the professional sensibilities of some exercise participants. These commanders' concerns remained and they were uneasy about the Midway operation. Until the very eve of the fleet's departure, commanders sought delays and changes. The Combined Fleet's plan for the imminent campaign had emerged from four days of wargaming without substantive changes or identified branches and sequels. Not even the unfavorable preliminary battle reports from the Coral Sea could shake the fanatical determination of the Combined Fleet staff and Admiral Yamamoto to execute the Midway and Aleutian Operations.⁸⁶

THE MIDWAY OPERATIONAL PLAN⁸⁷

The campaign plan produced by the Combined Fleet's planning process contained four major operations. These were code named MO (Port Moresby and extension of Rabaul's defensive perimeter), RY (the occupation of Naruru and Ocean Islands by the South Seas Force), AL (invasion of the Aleutians), and MI (invasion of Midway). A sequel to MI, an operation planned to secure New Caledonia, Fiji, and Samoa in July was still in draft form. MO was already in progress during the planning for second stage

operations. MO was to be followed sequentially by RY. However, MO was “postponed” after the Battle of the Coral Sea, which in turn delayed RY.⁸⁸

AL and MI were the two simultaneous operations with which the Combined Fleet intended to achieve the operational objective of the destruction of the US Navy’s carrier task forces. The Combined Fleet was divided into six great task forces for the execution of operations MI and AL. (See Charts 1 and 2). These task forces were spread across half the Pacific Ocean; from the Aleutians to the Gilberts and from Hawaii to Honshu -- almost sixteen million square miles. The surface units earmarked to deal with the US Navy task forces would cover an incredible 557,000 square miles.⁸⁹

Although a major offensive operation in its own right, AL’s intent was to support MI as an operational deception. AL had two objectives. First, it would deceive the enemy as to the true objective, Midway. Secondly, it would lure the carriers north to open a window of opportunity for executing MI unopposed by major US Navy units. AL’s landing forces would withdraw in September before the start of winter.

MI was the Combined Fleets main effort. It was to both invade Midway and destroy the US Navy. These twin objectives were envisioned as sequential, with the decisive fleet battle to destroy the US Navy’s carrier forces near Midway taking place after the island was secure and land-based aviation units were established ashore.

AL and MI were phased operations. AL would begin June 3rd with carrier-based operational fires to support its deception. These carrier strikes would be followed by seizure of the islands of Kiska and Adak in the Aleutians on the 5th. These minor

invasions would reinforce AL's deception mission by portraying the Combined Fleet's main attack.

MI would likewise begin with carrier aviation delivering fires on June 4th against Midway. These fires would "soften up" Midway's defenses and eliminate its air threat. These would be followed by landings on June 6th to secure the island. The plan called for Midway to be secure in one day. Once this was accomplished, air reconnaissance and bomber units would be forward deployed ashore to assist in detection and early warning of the Pacific Fleet's approach. Submarine forces would also deploy to Midway and begin using it as a forward operating base for continued reconnaissance and shipping attack missions.

The Combined Fleet's main body of heavy surface units would by June 6th have also closed on Midway. The plan called for these forces to remain in the area for seven days, ready to engage and destroy the US Navy's carrier task forces either moving from Pearl Harbor or returning from the Aleutians toward Midway. After the arrival of the US Navy, the longed-for decisive fleet battle would begin.⁹⁰

This was the battle that the Japanese navy had been purposefully built, armed, and trained to conduct. Submarines and Midway-based aircraft would attrit and shadow enemy forces enroute to the island. Nearer Midway, the carriers and lighter surface combatants would screen the battleships and heavy cruisers as they steamed into gunnery range of the American fleet. Gunfire and torpedoes would send the Pacific Fleet to the bottom and when the last American fleet carrier had slipped below the surface, the Combined Fleet's operational objective was accomplished. After a pursuit of minor

enemy combatants, the Combined Fleet would then move south for follow on operations, terminating operation MI.

The US Navy would, the Japanese planners had assumed, arrive at Midway sometime between the 7th and the 13th of June, days too late to interfere with the invasion and occupation of the island or with the concentration of the Combined Fleet. Achieving success against the American carriers in the second part of MI required information regarding the whereabouts of the Pacific Fleet's carrier task forces. This information would be gathered by two separate operational intelligence missions.⁹¹

The first of these missions envisioned the establishment of two submarine cordon lines across the US Navy's most probable routes toward the Midway area and away from Pearl Harbor. This plan spread twelve submarines across 240 miles in fixed positions beyond the range of overlapping fields of observation. These submarines were to be in position beginning June 1st. The submarine reconnaissance effort would be augmented by the second reconnaissance mission -- Operation K.

Operation K was an unconventional aerial reconnaissance mission to determine the strength, composition, and movements of US Navy forces in and around Hawaii.⁹² Its concept was to position a tanker submarine full of aviation gasoline near French Frigate Shoals, about 500 miles northwest of Hawaii, to await the arrival of two long-range flying boats. These aircraft would refuel from the tanker submarine and execute their reconnaissance of Hawaii and its adjacent waters between 31 May and 3 June then return to Wotje.

“The real way to get value out of the study of military history is to take particular situations, and as far as possible get inside the skin of the man who made a decision, realize the conditions in which the decision was made, and then see in what way you could have improved upon it.”

Field Marshal Earl Wavell⁹³

“The practical value of history is to throw the film of the past through the material projector of the present onto the screen of the future.”

Captain Sir B. H. Liddel-Hart⁹⁴

SECTION III: CONSIDERING A JAPANESE JOINT DOCTRINE

The first section of this paper introduced joint campaign planning doctrine through a detailed examination of five selected planning concepts. The second section developed the Midway case study with a focus on strategic issues and their operational solutions as reflected in the Japanese campaign plan.

This section applies those doctrinal planning concepts to the Combined Fleet's plan for continuing the war in 1942. This application is an assessment tool to measure the adequacy of campaign planning doctrine. This section will address each of the five selected concepts of center of gravity, decisive points, operational reach, balance, and branches and sequels in light of the key elements of Operations MI and AL.

CENTER OF GRAVITY

Admiral Ugaki saw the Pacific Fleet as the American center of gravity in his initial operations appreciation in January. At that time, he reasoned that an operation to seize Hawaii would compel the US Navy to confront the Combined Fleet.⁹⁵ Although the method of luring the Pacific Fleet into a decisive battle with the Japanese navy was later

changed to an attack on Midway, the identification of the US Navy as the center of gravity never wavered. Admiral Yamamoto in his telephonic conversation with Captain Watanabe was even more specific in naming the US Navy's carrier task forces as the American center of gravity.

This early and consistent vision of the US Navy's carrier task forces as the center of gravity provided a strong unifying concept that focused the Combined Fleet's operational planning. The insistence on the destruction of the enemy center of gravity through its collision with the Combined Fleet's center of gravity is the "direct attack" advocated by doctrine.⁹⁶

One aspect of joint doctrine's discussion of center of gravity that was perhaps not present in Operation MI is that of the protection of friendly centers of gravity. Looking back, it is easy to see that the Japanese carriers were, like their American counterparts, a center of gravity. However, this was not clear to the Japanese in 1942.⁹⁷ Admiral Yamamoto and many other senior naval leaders saw the battleships of the Main Force as the center of gravity. The Japanese would have considered these elements well protected. This protection came both from the task forces' own formidable defensive capabilities and from the powerful guard and screening forces deployed forward and to the flanks of the Main Body. The flaw in Japanese planning was one of incorrectly identifying their friendly center of gravity, not one of failing to protect it once it was identified.

DECISIVE POINTS

Joint doctrine relates decisive points directly to centers of gravity. Possession of decisive points gives the owner advantages in freedom of maneuver and initiative which

can be used to attack protected centers of gravity. Once the US Navy carriers were named as the enemy center of gravity, the planning challenge became to identify the decisive point, or points, where the Combined Fleet could gain these important advantages over the enemy and influence his center of gravity.

The Combined Fleet staff selected Midway as the decisive point and made it a terrain objective of Operation MI. Seizing Midway would force the Pacific Fleet to sail to its defense. Possession of Midway, especially after the subsequent forward basing of land-based aircraft on the island, would place the US Navy in a position of relative disadvantage when it closed on Midway.⁹⁸ A second decisive point which gave the Japanese positional advantage was the Combined Fleet's operating area northwest of Midway. From this position, the Combined Fleet could concentrate east or west of the island against the Americans.

OPERATIONAL REACH⁹⁹

Japanese planners believed that seizing Midway would draw out the American carriers, yet there was a possibility that the enemy carriers would not sortie to oppose the Combined Fleet at Midway. Admiral Yamamoto considered this and concluded that Midway had intrinsic value as an outpost in Japan's defensive perimeter. Opponents to Operation MI at Imperial General Headquarters did not view Midway as a strategic asset. Their convictions were based on an appreciation for the differences in operational reach between a Japanese navy based in Japan and a US Navy based in Hawaii.

MI's detractors argued that once occupied, Midway would be logistically insupportable. The already overtaxed Japanese shipping capacity could not sustain the

throughput of supplies, particularly aviation fuel, necessary to sustain an adequate level of flight operations. Japanese forces on Midway would also be within the operational reach of American bombers in Hawaii. Additionally, the Imperial Headquarters staff believed that even if Japanese aircraft on Midway survived American airstrikes and had the supplies to conduct operations, they would add little to the security of Japan. In joint doctrine, operational reach exists when military power can be employed decisively. If Japan attempted to use Midway as a forward base in 1942, it could not be decisive.

The Imperial Headquarters staff also objected to the selection of Midway as an objective designed as bait for the American carriers. The Japanese could not indefinitely sustain the fleet 2,500 miles from Japan at Midway. The Americans, they argued, could simply wait until the fleet sailed away and then retake Midway. They instead advocated the remainder of the Solomons or Fiji and New Caledonia as objectives. There the lines of communication would be roughly equal between the two fleets and the threat of American land based aircraft eliminated. Most importantly, these islands would be within the operational reach of the Japanese forward bases in Truk, the northern Solomons, and the Gilbert Islands.

BALANCE

Joint doctrine describes balance in terms of responsiveness, appropriate mix of forces, and imposing disequilibrium on the enemy. Balance represents a significant divergence between joint doctrine and the Japanese campaign plan.

Responsiveness. The MI and AL task forces were spread across an enormous expanse of the Pacific Ocean. Concentration of these dispersed forces would , if the need

arose, be a relatively lengthy process. The planned distance between Admiral Yamamoto's main Body and Admiral Nagumo's first Carrier Striking Force was 300 miles. The other two MI surface task forces would be 400 and 500 miles from the Main Body. Three-hundred miles represents 12 hours steaming for either group which, if they steer toward each other, can be reduced to six hours for a rendezvous by the two task forces. This time may seem short, but the American air attacks at Midway on June 4th which eliminated three Japanese carriers only lasted slightly less than four hours.¹⁰⁰ The planned dispersion of the fleet hindered responsive timely concentration or redeployment. This was exacerbated by Operation AL which drew 19 surface combatants and two carriers away from potential use in Operation MI.

Mix of Forces. In 1942 the Japanese navy was still a gun and torpedo navy not an airplane navy, making the battleship the capital ship of the Combined Fleet. The naval organization for Operations MI reflected this increasingly obsolescent thinking. The six great task forces were organized without regard for either the potential synergism of combining major platforms or the possible enemy actions which might call for different capabilities within the task forces. The Combined Fleet had optimized these task forces for specific missions, but had consequently degraded their flexibility and increased their vulnerability.¹⁰¹

Although the naval role reversal that would create task forces around carriers screened by battleships was still some two years in the future, this criticism is not purely hindsight. During the last week of April, Rear Admiral Yamaguchi had recommended the reorganization of the surface forces into three balance fleets centered around a nucleus

of three to four carriers supported by battleships, cruisers, and destroyers as screening forces. That the Combined Fleet did not implement this suggestion is not surprising.¹⁰²

When MI was being planned, the Japanese navy had yet to fight a fleet engagement involving carriers. Tactical concepts for carrier defense had no basis in practical battle experience. The Midway battle, still six months away, would become the catalyst for changing carrier air-defense tactics. Until this battle was fought, and lost, Japanese carriers would continue to rely on self-defense rather than the screening forces' heavy firepower from battleships and cruisers.¹⁰³

Enemy Disequilibrium Japanese planners did not consider imposing disequilibrium on the enemy as an element of successful military operations in 1942. Overconfident in their moral and material superiority, Japanese planners had scripted a series of American actions and responses which they convinced themselves the enemy would conform to. A cooperative enemy who blindly follows the script written for him by the friendly planners will be defeated whether he maintains his equilibrium or not. Throughout the campaign's planning and wargaming the Combined Fleet staff assumed such an enemy. Once Midway was seized the plan forfeited tactical initiative in favor of a passive defense. The success of this defense, like that of the entire operation, was predicated on an enemy who performed exactly as expected.¹⁰⁴

BRANCHES AND SEQUELS

The Japanese failure to investigate, identify, and develop branches and sequels may be attributed to the influence of victory disease. Victory disease imparted a vision of future combat actions as highly predictable events with subsequently inevitable

outcomes. This vision trivialized the influence of chance on operations. Military operations devoid of chance do not require flexibility or options.

Planners and senior officers infected by victory disease were not inclined to ask the difficult “What if...?” and “What next?” questions about the operation, nor would they have been interested in discovering the answers even if the questions were asked.¹⁰⁵ Joint doctrine is clear in its emphasis on the importance of answering these questions, in the form of branches and sequels, as a mitigating hedge against the vagaries of chance and friction.

Doctrine embraces the notion of assumption-based operational planning. Doctrine also provides the concept of branches and sequels as a method to address the possibility of flawed assumptions. Japanese planners never seriously questioned their planning assumptions. Cast in the most favorable light imaginable, these assumptions colored every facet of planning with fantastic optimism and a dogmatic faith in victory. The self-deluding infallibility of the Combined Fleet’s planning assumptions prevented their use as a departure point for branches or sequels.

“Given a well-founded knowledge of basic principles, any man of reasonably cool and logical mind can work out most of the problems for himself, provided he is not inhibited in his thinking.”

Field Marshal Erwin Rommel¹⁰⁶

“We have acquired this knowledge not simply from hearing about it but also from having been taught by a certain amount of experience. ... Then, on our own, we have put it into practice and, as best we could, almost made it a part of us.”

Emperor Nikephorus II Phokas¹⁰⁷

SECTION IV: CONCLUSIONS AND ASSESSMENT

RELEVANCE AND METHOD

This paper examined the adequacy of current joint campaign planning doctrine. Far from being simple academic speculation, this effort has significant value. Joint planning doctrine directly influences the national security of the United States. The foundation of effective and rigorous military planning is the body of professional doctrine that shapes and animates the planning process. The use of poor or insufficient planning doctrine may result in flawed campaign plans which unnecessarily risk the resources and prestige of the United States as well as the lives of America’s servicemen and women. Successful campaigns, developed from intellectually sound and militarily thorough planning doctrine, are the building blocks of national victory in war.

A case study of the Japanese plans and planning for their 1942 Pacific campaign was this paper’s method of inquiry. The use of historical case studies as a basis for doctrinal inquiry is a common investigative technique. This study specifically selected Japan’s 1942 campaign because of several similarities between Japan’s planning concepts

and challenges and those of the United States in a potential future conflict. Strategically, Japan was defending its vital national interests through the open and unrestricted use of its armed forces. At the operational level, Japan faced a peer competitor in the Pacific. The Japanese plan to defeat the US Navy relied on tactical and technical superiority and on the application of overwhelming strength at a time, place, and tempo of Japan's choosing. The Combined Fleet's concepts of operational design centered on power projection and expeditionary warfare. These are clear contextual parallels between the circumstances surrounding the Japanese planning efforts and a possible future security environment for the United States and its military forces.

The five planning concepts of center of gravity, decisive points, operational reach, balance, and branches and sequels formed this study's framework for its investigation and assessment of joint doctrine. The retroactive application of these concepts to Japanese planning challenges developed several key insights.

JAPANESE PLANS AND JOINT DOCTRINE

The Japanese considerations of center of gravity were sound. As a planning focus and as an operating concept, the direct attack and destruction of the US Navy's carrier task forces as the American center of gravity is fully aligned with current joint doctrine.

The Combined Fleet's identification of Midway as a decisive point and objective was also sound. The occupation and development of Midway as a staging base would give clear advantages in position, initiative, and freedom of maneuver to the Japanese. Considered separately from issues of operational reach, these advantages could be decisive. Joint doctrine would support the naming of Midway and the Combined Fleet's

operating area as decisive points and the identification of Midway as an objective for the operation.

Considerations of operational reach within joint doctrine do not support the seizure and occupation of Midway as an element of Operation MI. Joint doctrine explains that the extension of friendly operational reach relative to the enemy's through the seizure or neutralization of decisive points is a key component of campaign design. Midway would neither extend Japan's operational reach, nor reduce the United States'.

The Japanese failure to initiate or pursue the development of branches and sequels to Operations MI and AL is the greatest single flaw in their campaign planning. The plan's fundamental rigidity, lack of anticipation, and inability to respond to the unexpected are the very conditions that joint doctrine seeks to avoid. Joint doctrine supports neither the close-minded deterministic character of Japanese operational planning, nor the inflexibility such planning methods imbedded in the plan they produced.

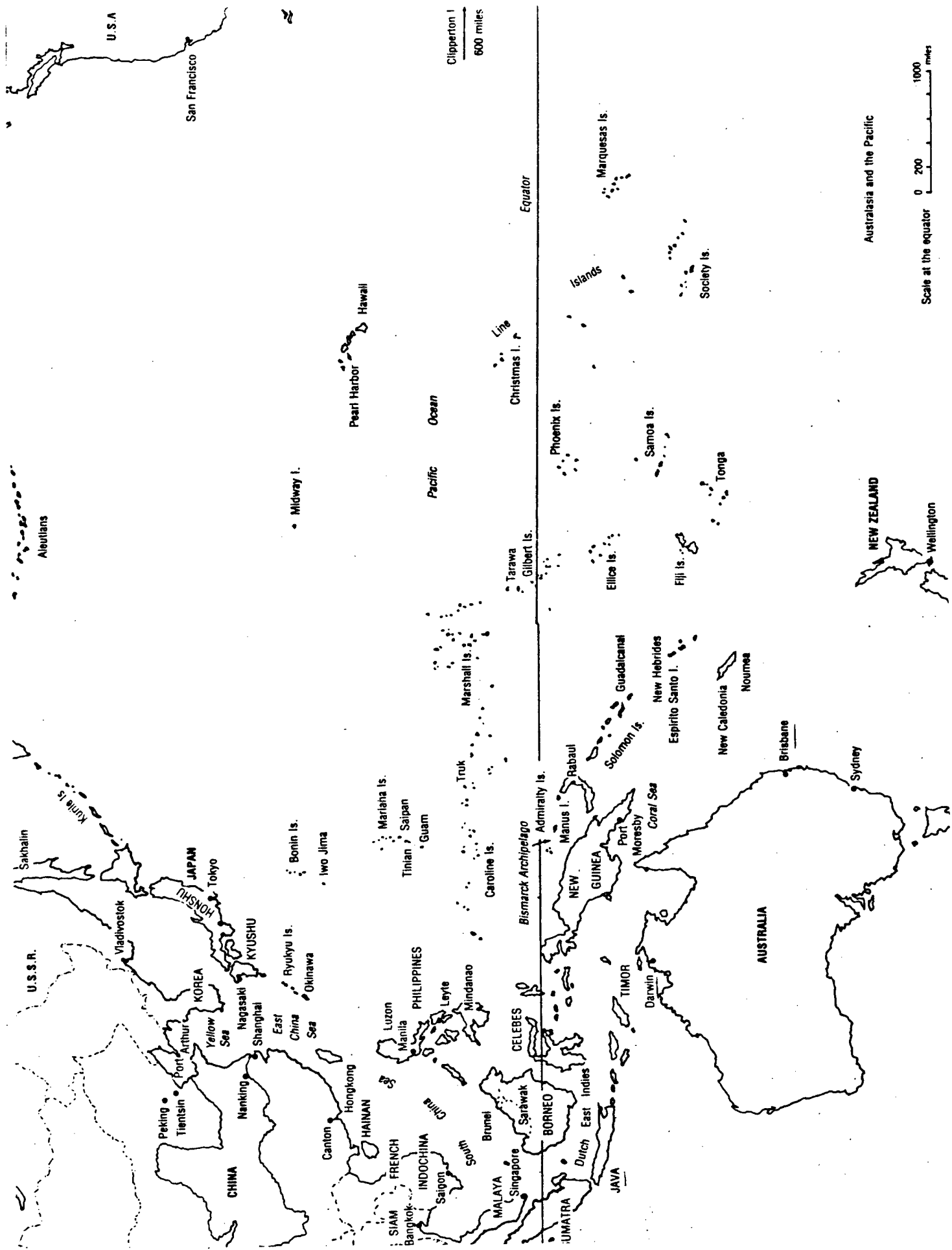
JOINT DOCTRINE ASSESSED

The rigorous application of current joint doctrine by the Japanese to the planning for the 1942 campaign would have resulted in the production of a more thorough, resilient, and potentially more successful plan. Joint campaign planning doctrine, a way to think about warfare, would have overcome the challenges involved in planning this campaign.

Carried forward to our own era, this conclusion clearly indicates the adequacy of the doctrine for joint conventional campaign planning. Joint doctrine provides a

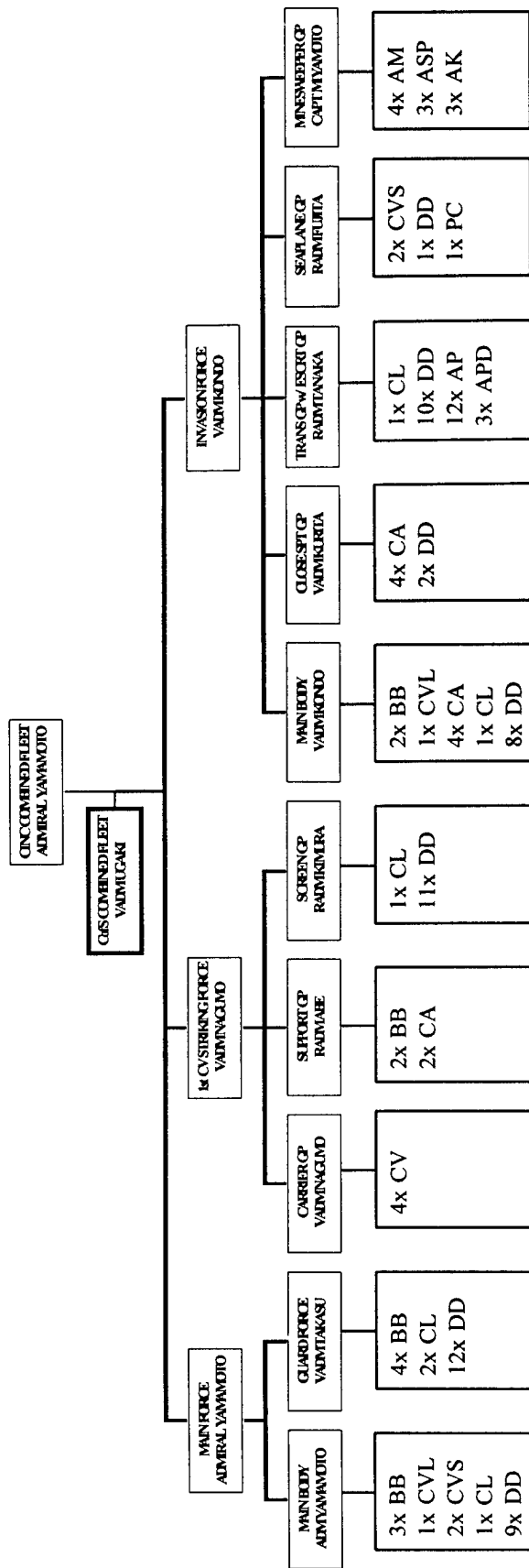
sufficient conceptual framework for the design of war-winning conventional campaigns.

When artfully and rigorously applied, the plans developed from this doctrine will continue to maximize and focus the United States' military might in the pursuit and defense of American national security into the 21st century.



MAP 1: PACIFIC OCEAN AREAS - 1942

COMBINED FLEET TASK ORGANIZATION -- OPERATION MI *



NOTES: 1) Advance (Submarine) Force, not included in diagram; consisting of 15 I-Boat Submarines.

2) Logistics vessels not shown.

MI FORCES

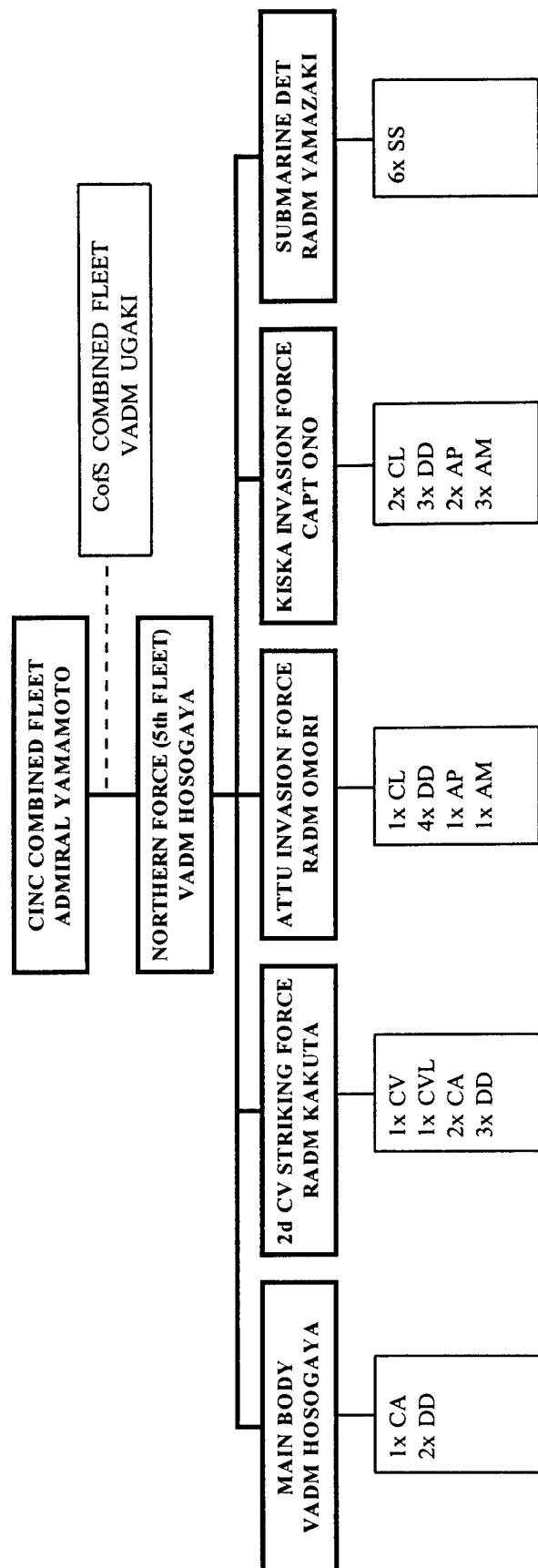
11x BB
4x CV
2x CVL
4x CVS
10x CA
6x CL
53x DD

ABBREVIATIONS: BB = BATTLESHIP, CV = CARRIER, CVL = LIGHT CARRIER, CVS = SEAPLANE CARRIER, DD = DESTROYER

CA = HEAVY CRUISER, CL = LIGHT CRUISER, AP = TRANSPORT, APD = DESTROYER-TRANSPORT

ASP = SUBCHASER, AK = CARGO VESSEL, PC = PATROL CRAFT

COMBINED FLEET TASK ORGANIZATION -- OPERATION AL *



NOTES: 1) Logistics vessels not shown.

AL FORCES

1x CV
1x CVL
3x CA
3x CL
12x DD
6x SS

ABBREVIATIONS: BB = BATTLESHIP, CV = CARRIER, CVL = LIGHT CARRIER, CVS = SEAPLANE CARRIER, DD= DESTROYER

CA = HEAVY CRUISER, CL = LIGHT CRUISER, AP = TRANSPORT, APD = DESTROYER-TRANSPORT

ASP = SUBCHASER, AK = CARGO VESSEL, PC = PATROL CRAFT

ENDNOTES

¹ Tsouras, Peter G., ed. *Warrior's Words: A Quotation Book From Sesostriis III to Schwarzkopf 1871 BC to AD 1991*. London: UK, Cassel, 1992, p. 127. Hereafter cited as "Tsouras". This quotation is taken from Phormio's speech to the Athenian Navy in 429 BCE as recorded in Thucydides' *The Peloponnesian War* written in 404 BCE. Phormio was a prominent Athenian commander and victor over the Peloponnesian League in two important naval battles in 429 BCE.

² Tsouras, p. 127. GEN O'Daniel commanded 3d Infantry Division 1944-45 and later I Corps in Korea 1950-52.

³ The information in this brief account of the Midway battle's aftermath is based largely on the following sources:

Bates, Richard W. *The Battle of Midway, Including the Aleutian Phase, June 3 to June 14, 1942. Strategic and Tactical Analysis*. Newport RI: Naval War College, 1948. Hereafter cited as "Bates."

Dull, Paul S. *A Battle History of the Imperial Japanese Navy (1941-1945)*. Annapolis, MD: United States Naval Institute, 1978. Hereafter cited as "Dull."

Fuchida, Mitsuo (Capt, IJN) and Masatake Okumiya (Cdr, IJN). *Midway: The Battle that Doomed Japan*. Annapolis, MD: United States naval Institute, 1955. Hereafter cited as "Fuchida."

Walker, MAJ James W. USAF. *The Battle of Midway*. Maxwell AFB, AL: ACSC/EDCC, 1984.

Willmott, H. P. *The Barrier and the Javelin: Japanese and Allied Pacific Strategies February to June 1942*. Annapolis, MD: Naval Institute Press, 1983. Hereafter cited as "Willmott."

⁴ Sailing distance is for Main Force and Mobile Force task forces which sortied from the Inland Sea. Two other statistics stand out; during this single operation the Combined Fleet would burn more fuel oil than it had in the entire previous year; the land area of Midway, about 2,000 acres, was less than the total deck area of the ships sent against it.

⁵ So confident were the men of the army unit sent to invade the island that they left instructions in Saipan for their mail to be forwarded to Midway. Costello, John. *The Pacific War 1941-1945*. New York, NY: Quill, 1981, p. 281. Hereafter cited as "Costello."

ENDNOTES

⁶ Bates, p. 26; and Fuchida, p. 218. First sighting of an important element of the Japanese forces was by a Midway-based aircraft at 0930 June 3d. Yamamoto's withdrawal order was issued 0255 June 5th.

⁷ The best summary of the Combined Fleet staff's decision process and the key facts and assumptions considered is found in Willmott, p. 473-480. See also Fuchida, p. 214-217.

⁸ Fuchida, p. 217.

⁹ Tsouras, p. 323. Tsouras remarks that this is posted as a sign above the entrance to the Joint Staff section of the Pentagon.

¹⁰ Napoleon I. 18 September 1806, to Joseph, *Correspondence*, No. 10809, Vol. XIII, 1858-1870. From David Chandler's *Campaigns of Napoleon*. New York, NY: MacMillan Publishing Co., 1966, p. 145-146. Chandler's source is cited as H. Sargent's *Napoleon Bonaparte's First Campaign*, London: 1895, p. 16. Also cited in a different form in Tsouras, p. 322.

¹¹ Chandler, David G. *Campaigns of Napoleon*. New York, NY: MacMillan Publishing Co., 1966, p. 162. Chandler identifies three distinct phases in the execution of Napoleon's battles and five sub-phases for the opening of a campaign; all orchestrated under three forms of strategic maneuver. Chandler's *Appendix B* cites 15 major battles where Napoleon employed the same *manoeuvres sur les derrieres* from 1796 through 1813.

¹² Clausewitz, Major-General Carl von. *On War*. Michael Howard and Peter Paret, eds. and trans., Princeton, NJ: Princeton University Press, 1976, Book 1, Ch 1. Hereafter cited as "Clausewitz". References to the intimate connection between war and politics are found throughout *On War*, however Book 1, chapter 1 offers the clearest and most concentrated discussion. It is here, (page 87), we find that most famous Clausewitz quote "War is merely the continuation of policy by other means."

¹³ Clausewitz, p. 100-112. The cited pages are those devoted specifically to Clausewitz's discussion of genius. However, the desirable attributes of commanders and generals are found throughout *On War*. The concept of *coup d'oeil* is defined by Clausewitz on page 102 as "...the quick recognition of a truth that the mind would ordinarily miss or would perceive only after long study and reflection." When placed within the context of Clausewitz's own experiences his discussion of genius and *coup d'oeil* are clearly patterned after Napoleon, to whom Clausewitz assigned near-mythical proportions of penetrating insight and battlefield omniscience. Perhaps the most direct reference to Napoleon and his planning capability is on page 197 where Clausewitz states

ENDNOTES

“...skillful concentration at the decisive point, is much more frequently based on suitable planning from the start... This is particularly characteristic of...Bonoparte.”

¹⁴ Chandler, David G. *Campaigns of Napoleon*. New York, NY: MacMillan Publishing Co., 1966, p. 145

¹⁵ Clausewitz. This section is a synopsis of the arguments which Clausewitz provides in Book 3, Chapter 1 and in Book 8, chapter 1 concerning the simplicity of planning concepts and the difficulties of execution, where execution requires genius. Clausewitz observes “Everything in strategy is very simple, but that does not mean that everything is very easy.” [p. 178]. Clausewitz expands this pithy statement on pages 179 in discussing Frederick’s campaign of 1760, and in pages 577-578. Evidence of Clausewitz’s deliberate approach to campaign planning is found in Book 8, Chapter 9 where he lays out a sequential planning process based on straightforward analysis without resort to “genius.”

¹⁶ Clausewitz, p. 177.

¹⁷ Schneider, Dr. James J. Theoretical paper No. 5, *The Eye of Minerva: The origin, Nature, and Purpose of Military Theory and Doctrine*. (SAMS textbook), School of Advanced Military Studies, Ft. Leavenworth, KS: USACGSC, 1986), p. 15. This statement concerning the function of doctrine is a broad summary of the key points Dr. Schneider makes on page 15.

¹⁸ Joint Chiefs of Staff. Joint Pub 5-0 *Doctrine for Planning Joint Operations*. Washington, DC: JCS, 1995, Chairman’s Introduction. Hereafter cited as “Joint Pub 5-0

¹⁹ Joint Pub 5-0, p. II-18.

²⁰ Joint Chiefs of Staff. Joint Pub 3-0 *Doctrine for Joint Operations*. Washington, DC: JCS, 1995, p. III-5. Hereafter cited as “Joint Pub 3-0.

²¹ Joint Chiefs of Staff. Joint Pub 5-00.1 *Doctrine for Joint Campaign Planning* (Initial Draft). Washington, DC: JCS, 1992, p. I-1. Hereafter cited as “Joint Pub 5-00.1.

²² Mendel, COL William W. and COL Floyd T. Banks, Jr. *Campaign Planning*. U.S. Army War College, Strategic Studies Institute, Carlisle, PA: USAWC, 1988, p. 106-107. Hereafter cited as “Mendel”. Pages cited are the concluding summary of an investigative report into the status of campaign planning in 1988. Mendel’s remarks support the criticality of doctrine for the campaign planning process and refute the notion of “natural masters of the art of war.”

²³ Service doctrinal publications also address campaigning in a joint environment. However, these Joint Publications are the “senior” warfighting guides for United States

ENDNOTES

forces and are self-proclaimed as "...authoritative; as such, this doctrine will be followed... If conflicts arise between the contents of [these] publication[s], [these] publication[s] will take precedence..." This quote is specifically from the preface to Joint Pub 3-0, but the same words appear in all other Joint Pubs. Joint Pub 5-0 states "Joint operation plans are developed...in compliance with joint doctrine." [p. I-13]. It should be noted that Joint Pub 5-00.1 is currently being revised from its 1992 draft. Many of the concepts initiated in Joint Pub 5-00.1 are more fully matured and developed in Joint Pubs 5-0 and 3-0 issued in 1995.

²⁴ This list was selected from among the fourteen "Facets of Operational Art" identified in Joint Pub 3-0, p. III-10. Their connection to campaign planning is through the manual's observation "JFC's employ operational art...in developing campaigns and operations." [p. III-9]. Center of gravity, branches and sequels, and decisive points were selected because of their consistent association with operational planning. Operational reach and approach and balance were chosen because of their distinct applicability to the selected case study.

²⁵ Tsouras, p. 146. This passage is from Foch's 1919 publication *Precepts and Judgments*.

²⁶ From an address at the US Army Command and General Staff College 16 December, 1960. Quoted in Heintz, COL Robert Debs jr., USMC, ed. *Dictionary of Military and Naval Quotations*. Annapolis, MD: United States Naval Institute Press, 1966, p. 95. Hereafter cited as "Heintz."

²⁷ Joint Pub 5-0, p. GL-10. This definition is extracted from Joint Pub 1-02 *DOD Dictionary of Military and Associated Terms*. Washington, DC: JCS, 1994.

²⁸ Joint Pub 3-0, p. GL-2. This definition is extracted from Joint Pub 1-02 *DOD Dictionary of Military and Associated Terms*. Washington, DC: JCS, 1994.

²⁹ Joint Pub 3-0, p. III-4. See also Mendel, p. 98-100.

³⁰ Joint Pub 3-0, p. III-5. See also Mendel, p. 98-100.

³¹ Ironically, this disparity between an abundance of theoretical constructs and the relative dearth of "how to" and application has been the subject of several criticisms of joint doctrine whose authors appear to want the doctrine to be something it expressly avoids. See especially Heredia, LTC Michael D. *Building a Campaign: The Essential Elements of Operational Design*. (SAMS Monograph). Ft. Leavenworth, KS: USACGSC, 1995; Massinon, MAJ Anton E. *Course of Action Development in Support of Campaign Planning*. (SAMS Monograph). Ft. Leavenworth, KS: USACGSC, 1994; and Johnson, MAJ John D. *Sequencing Operations: Considerations for the Operational Planner*. (SAMS Monograph). Ft. Leavenworth, KS: USACGSC, 1991. Joint Pub 3-0

ENDNOTES

states “[JFCs] plan and execute campaigns by applying operational art. How commanders apply operational art will vary...” (p. III-5). The idea of campaigning theory being more important than planning “recipes” is reinforced by the US Army’s FM 100-7, *Decisive Force: The Army in Theater Operations*. Washington, DC: GPO, 1995, p. 1-5 and 1-5, which state: “No finite set of principles exists to help in formulating an operational concept, but history has validated the application of several key military notions or concepts.”

³² Clausewitz, p. 595-596.

³³ Clausewitz, p. 485. See also especially p. 577, where he writes”...[I] tried to make it absolutely clear that the destruction of the enemy is what always matters most.”

³⁴ Joint Pub 5-0, p. GL-4. This definition is extracted from Joint Pub 1-02 *DOD Dictionary of Military and Associated Terms*. Washington, DC: JCS, 1994; and is identical to that found in Joint Pub 3-0.

³⁵ Joint Pub 5-0, p. II-20, Figure II-5. See also p. II-18 “[The campaign plan] orients on the enemy’s centers of gravity.” An identical chart appears in Joint Pub 3-0, p. III-8.

³⁶ Joint Pub 5-00.1, p. II-7. This is a strictly Clausewitzian vision of the utility of centers of gravity -- mass vs. mass. The later Joint Pubs provide a more balanced interpretation while retaining mass vs. mass as “...mass effects against the enemy’s sources of power in order to destroy or neutralize them.” (Joint Pub 3-0, p. III-20).

³⁷ Joint Pub 3-0, p. II-20 to II-21.

³⁸ Joint Pub 3-0, p. II-20.

³⁹ Vego, Milan. *Fundamentals of Operational Design*. (Unpublished text material) Newport, RI: US Naval War College, 1995, p. 4.

⁴⁰ Jomini, Baron General Antoine. *Summary of the Art of War*. BG J. D. Hittle, trans. and ed. In *Roots of Strategy, Book 2*, Harrisburg, PA: Stackpole Books, 1987, p. 466-467. Jomini develops the concept for decisive points in the cited text. Jomini defined several different types of such points; some related to maneuver, some geography, some to their relative degree of importance. As concepts of strategy have evolved and the notion of an operational level of war has emerged, Jomini’s ideas have been consolidated into a more general concept of the simple “decisive point.”

⁴¹ Joint Pub 3-0, p. III-21. Oddly, decisive point(s) is not defined under the glossaries found in Joint Pubs 3-0, 5-0, or 5-00.1.

⁴² Joint Pub 3-0, p. III-21.

ENDNOTES

⁴³ Joint Pub 3-0, p. III-21.

⁴⁴ Joint Pub 5-0, p. II-20, Figure II-5.

⁴⁵ Joint Pub 5-0, p. GL-12 defines sustainment as "The provision of personnel, logistic, and other support required to maintain and prolong operations or combat until successful accomplishment or revision of the mission or of the national objective." Operational sustainment is "sustainment that establishes requirements for procuring national resources from the sustainment base, establishing a forward base of operations, opening and maintaining lines of communication, providing intermediate bases of operation to support phasing, and establishing priorities for services and support, by phase, throughout the campaign." From Vego, Milan N., *Fundamentals of Operational Art: A Glossary of Terms and Their Definitions*. (Initial Draft), Newport, RI: Naval War College, 1994, p. 50. Professor Vego cites "Joint Pub 3-0, p. III-17" as his source. However, although joint doctrine is the source for this definition, this citation is incorrect.

⁴⁶ Joint Pub 3-0, p. III-16.

⁴⁷ Vego, Milan. *Fundamentals of Operational Design*. (Unpublished text material) Newport, RI: US Naval War College, 1995, p. 24.

⁴⁸ Joint Pub 3-0, p. III-13.

⁴⁹ Joint Pub 3-0, p. III-13. It is interesting to note the similarity between this current doctrinal disequilibrium concept and the warfighting theory of Sun Tzu. Unlike Clausewitz's emphasis on the physical destruction of the enemy as a method to undermine his will, Sun Tzu advocated using maneuver and surprise to achieve similar effects. Maneuvering to unexpectedly mass friendly force against enemy weakness and to move through gaps in enemy dispositions lent an air of awesomeness (*wei*) to friendly forces. This aura of awesomeness contributed to the psychological dislocation and paralyzing chaos (*luan*) of the enemy which was the goal of Sun Tzu's conceptual model of war. Deception and surprise enhanced the psychological impact of maneuver and were themselves enabled by successful maneuver. Maneuver as a component of deception allowed friendly forces to "have no perceptible form...[and then to] concentrate while the enemy [was] fragmented." Sun Tzu, *The Art of War*, Ralph D. Sawyer, trans. Boulder, CO: Westview Press, Inc., 1994, p. 192. This discussion of the interrelationship and transformation of *li* to *wei* to *luan* and the concept of psychological dislocation as the goal of ancient Chinese warfare are taken largely from a lecture given by Professor Arthur Waldron at the US Naval War College in August, 1995.

⁵⁰ Joint Pub 3-0, p. III-20.

ENDNOTES

⁵¹ Clausewitz, p. 85-86 and 119-120. For Clausewitz, friction and chance were natural and inescapable byproducts of war which artful commanders could mitigate but not erase. It was these two factors which were responsible for the discrepancy between "real war and war on paper." [p. 119]. Feldmarschal Melmuth von Moltke, a Clausewitz contemporary, reportedly remarked that "No plan survives contact with the enemy." and "I never plan beyond the first battle." While clearly overstatements, these sayings certainly capture the spirit of friction and chance.

⁵² Joint Pub 5-00.1, p. II-14.

⁵³ Joint Pub 3-0, p. III-20. In the 1st century, Publilius Syrus in his *Sententiae* observed; "It is a bad plan that cannot be altered." Quoted in Heinl, p. 239 Liddel-Hart in his 1944 publication of *Thoughts on War*, observed "A plan, like a tree, must have branches -- if it is to bear fruit. A plan with a single aim is apt to prove a barren pole." Quoted in Tsouras, p. 324.

⁵⁴ Joint Pub 3-0, p. III-5.

⁵⁵ Vego, Milan. *Fundamentals of Operational Design*. (Unpublished text material) Newport, RI: US Naval War College, 1995, p. 22. Professor Vego highlights the ability of branches and sequels to accelerate the cycle of operational decision making. It is interesting to consider some of history's famous campaigns and major operations that failed to anticipate their own success or failure and prepare sequels accordingly -- COBRA 1944 (unexpected success), ZITADEL/Kursk 1943 (unexpected failure), Gallipoli 1915 (unexpected failure), MICHAEL OFFENSIVE 1918 (unexpected success), and France 1940 (GE unexpected success; FR unexpected failure). Writing in about 100 AD in *Lives*, Plutarch says of Cannae "Hannibal knew how to gain a victory, but not how to use it." Hannibal's cavalry commander, Maharbal, reportedly said this to Hannibal when the latter did not immediately march on Rome. Quoted in Heinl, p. 143.

⁵⁶ Costello, p. 268.

⁵⁷ From Mahan's *Naval Strategy*, 1911. Quoted in Tsouras, p. 287.

⁵⁸ The bulk of the material in this subsection comes from Ienaga's account of the lead up to war with the United States. See p. 3-12, 57-70, 129-152; and especially p. 132-133. See also D. Clayton James, "American and Japanese Strategies in the Pacific War" in *Makers of Modern Strategy: From Machiavelli to the Nuclear Age*, Peter Paret, ed. Princeton, NJ: Princeton University Press, 1986, p. 706-708.

⁵⁹ The decision to attack the United States was a difficult one for Japan. Many believed that America would not enter the war unless directly attacked and that operations into the "Southern Resource Area" could be conducted without triggering a direct American response. However, a sense of inevitability with respect to war with the

ENDNOTES

United States, coupled with the strategic position occupied by US forces in the Philippines, Japan's long exposed sea flank in the central pacific, and the US Navy's accelerating building program argued in favor of war. Admiral Yamamoto's daring plan to raid Pearl Harbor to preclude the US Navy's interference in the CENTRIFUGAL offensive decided the matter. See Willmott, p. 10-14. See also Michael A Barnhart's "Japan's Economic Security and the Origins of the Pacific War," *Journal of Strategic Studies*, Vol 4, No. 2, June 1981: 105-124 for the economic imperatives that propelled Japan into war. John Prados addresses the military impact of oil restrictions in; Prados, John. *Combined Fleet Decoded: The secret History of American Intelligence and the Japanese Navy in World War II*. New York, NY: Random House, 1995, p. 110. Hereafter cited as "Prados."

⁶⁰ For reference consult: Griess, Thomas E., ed. *West Point Military History Series Atlas for the Second World War -- Asia and the Pacific*. Wayne, NJ: Avery Publishing Group Inc., 1985; or Map, *World Plotting Series*, 1:18,000,000 *Oceania* Sheet 5, Series 1147, Edition 2, DMA, Washington, DC, 8-81; or Map Supplement "Pacific Ocean, Atlas plate 61," *National Geographic Magazine*. Washington, DC: National Geographic Society, April, 1962.

⁶¹ Ugaki, Admiral Matome. *Fading Victory: the Diary of Admiral Matome Ugaki*. Masataka Chihaya, trans. Pittsburg, PA: University of Pittsburg Press, 1991, p. 65. Hereafter cited as "Ugaki." See also Fuchida, p. 49-50. On 5 January; "We shall be able to finish first stage operations by the middle of March... What are we going to do after that? Advance to Australia, to India, attack Hawaii... ?" [Ugaki, p. 68].

⁶² These strategic courses of action are articulated and discussed by Willmott, p. 39-42. Willmott states that defensive courses of action never really had a chance of acceptance, although the defense would have allowed for training and integrating replacement aircrews. [p. 39]. Another consideration, (alluded to by Prados, (p. 279), though in connection with the army's refusal to approve an offensive into Australia), tended to favor defense -- limited cargo shipping. Japan was faced by two mutually exclusive and highly divergent uses for civilian shipping. Allocation of shipping to military offensives and the subsequent requirement to sustain far flung garrisons significantly reduced that available for the export of newly acquired resources to Japan. Until Japan reduced military consumption, always higher in offensive operations, and stabilized military resource requirements, shipping allocation could not be optimized nor could full exploitation of military conquests take place. See also Fuchida, p. 54-63.

⁶³ The constant friction between the Japanese army and navy was a key element in Japanese strategic decisions which were frequently just hard fought tenuous compromises between these two antagonists. Toshiyuki Yokoi, writing in "Thoughts on Japan's Naval Defeat." in *The Japanese Navy in World War II In the Words of Former Japanese Naval Officers*. Dr. David C. Evans ed. and trans. Annapolis, MD: Naval Institute Press, 1986; observes "...the army tried to show its predominance over the navy and vice versa. In this

ENDNOTES

way, discord between the two services eventually developed into a very serious situation. Neither wished to be subordinate to the other, and this attitude directly prevented coordination of objectives." [p. 501-502]. See also Saburo Ienaga's, *The Pacific War, 1931-1945: A Critical Perspective on Japan's Role in World War II*. Frank Baldwin trans. New York, NY: Pantheon Books, 1978, p. 39. Hereafter cited as "Ienaga." Ienaga states "The army and navy each jealously guarded their autonomy. Not only would they not tell the civilians anything, but each service refused to share information with the other." See too Willmott, p. 36-37. Willmott states "Thus at the highest level there was a fundamental divergence of attitudes about the conduct of the national war effort ..." and "...the two services fought one another for the acceptance of their own particular points of view. At best, policy evolved not from choice, but from compromise and exhaustion..."

⁶⁴ Willmott, p. 44-*passim*. Willmott records a diary entry of Captain Yoshitake Miwa, Combined Fleet Staff Air Officer:

We want to invade Ceylon; we are not allowed to! We want to invade Australia; we cannot! we want to attack Hawaii; we cannot do that either! All because the army will not agree to release the necessary forces. though it is understandable that the army has to retain troops to deal with the Soviet Union, is it that impossible to spare us just one or two divisions out of a million men in Manchuria and 400,000 in China? [p. 79].

See also Prados, p. 279-281 and 289-290. Ironically, the army's rationalization for its lack of support were, in the end, among the best arguments against the Midway operation. See also Michael A. Barnhart's "Japan's Economic Security and the Origins of the Pacific War" *Journal of Strategic Studies*, Vol. 4, No. 2, June, 1981: 116-117 for a discussion of the army's pre-war reasoning on troop allocation and priorities. The navy conducted single-service raids into the Indian Ocean toward the end of first stage operations in April, but these were far short of the invasion of Ceylon initially envisioned by navy planners.

⁶⁵ "Fiji, Somoa, and other targets in the Australia area" had been included as possible objectives in an early draft of stage two operations. The army's veto of operations in Australia induced the Naval General Staff to develop this thin planning concept into greater offensive scheme. This dovetailed neatly with a previous IGHQ directive. This directive had ordered the meager resources of the Japanese forces in the area to continue their advance beyond Rabaul (taken 29 JAN 42) and seize Nauru and Ocean Island (between Rabaul and the Gilberts) and Port Moresby in New Guinea. This was the proverbial "foot in the door" for the navy's desire to isolate Australia.

⁶⁶ Ugaki, p. 75 and Fuchida, p. 53. Fuchida states "...the Combined Fleet planners concluded that it was advisable to seize Midway Island ... a move against Midway would draw out the enemy Fleet so that it could be destroyed in a decisive battle." See also Prange, Gordon W., Donald M. Goldstein, and Katherine V. Dillon *Miracle at Midway*.

ENDNOTES

New York, NY: Penguin Books, 1982, p. 14-16 for a discussion of preliminary Japanese planning. Hereafter cited as "Prange."

⁶⁷ Fuchida, p. 60-61. Willmott presents an abbreviated form on pages 69-70. See also Prados, p. 290 for an analysis of the motives and actions of the attendees.

⁶⁸ Prados, p. 290 is explicit in his discussion of the threatened resignation. Fuchida provides the full text of Yamamoto's response [p. 60-61], but does not mention a possible resignation. Ugaki's entry for 5 April relates the conference, but does not record Yamamoto's telephonic involvement. [p. 109]. Ugaki's editor echoes an observation of Gordon Prange that Yamamoto used a resignation threat to "blackmail" the staff into accepting. Willmott offers other evidence to support a resignation threat. he states that a similar threat was made in October, 1941 to railroad the staff into accepting the Pearl Harbor raid. [p. 72]. This is corroborated by Fuchida, p. 24. Costello cites "myopia of overconfidence" and "victory disease" as the proximate causes of Yamamoto's intransigence. [p. 269].

⁶⁹ The Army Section lacked the bureaucratic/political power to maintain its opposition to the Midway plan after the Naval General Staff had knuckled under to the Combined Fleet armed with Yamamoto's threat to resign. Moreover, since the army had no significant forces involved, their stake in the operation was too small to justify or support continued resistance. Willmott observes that "...the price of continuous argument and muddled strategic thinking was a plan of campaign riddled with inconsistencies." [p. 78].

⁷⁰ Dull, p. 134. Dull cites six months as the window in which a decisive victory over the US Navy was mandatory in order to avoid an attrition war. Ugaki records similar thoughts for 14 January: "...As time passes, we would lose the benefit of the war results so far gained. Moreover, the enemy would increase his strength, while we would just be waiting for him to come." [Ugaki, p. 75]; and "Time would work against Japan because of the vastly superior national resources of the United States..." [Fuchida, p. 50]. See especially Willmott, p. 33 and also p. 101; also p. 79-80 on the issue of timing. See also Fuchida, p. 76-77.

⁷¹ Willmott, p. 7-14. The maintenance of naval superiority was a consistent factor in Combined Fleet deliberations. The interwar period had seen a series of naval limitation agreements between Japan and the United States. In the 1920s and 1930s the United States lacked the national will to support construction to the limits allowable under treaty. However, the Two-Ocean Expansion Act passed by Congress after the Fall of France in 1940 allocated \$4 Billion for the construction of 7 battleships, 18 carriers, 27 cruisers, 115 destroyers and 43 submarines. These figures do not include the 130 other major vessels then under construction. Once this US Navy expansion program was completed and added to the US Navy's existing 358 major ships in service, Japanese relative strength would plummet. In 1941 and into early 1942 the Japanese strength, with

ENDNOTES

respect to the entire US Navy stood at 70-75%. This would fall to 65% in late 1942, to 50% in 1943, and 30% by 1944. The Japanese position of superiority over the Pacific fleet would evaporate in three years. After the Battle of the Coral Sea and prior to Midway, the Japanese assessed their fleet carrier strength versus the US Pacific Fleet as not less than 7:3, and carriers overall as not less than 11:6, (Bates, p. 13). The goal of naval attrition was to force America's new construction to replace losses, not add to existing strength. The Japanese hoped to keep attrition close enough to new construction to maintain relative superiority long enough to allow a negotiated settlement. However, they realized that the national economic capacity of the United States would eventually overwhelm the Japanese navy. Hence the consistent pursuit of the "great decisive naval battle" with its coincident damage to United States morale and will to continue. See Morison, Samuel Elliot, *History of United States Naval Operations in World War II*, Vol III, *The Rising Sun in the Pacific 1931-April 1942*, p. 27-34 for a discussion of the US Navy's expansion and preparations for war in the Pacific.

⁷² Willmott, p. 67. See Ugaki, p. 83-84. Ugaki writes on 2 FEB 42 "...[surprise carrier raids are] the easiest for them and the most effective. And the most probable move they would make would be an air raid on our capital [sic]." Admiral Yamamoto began to fear an attack on Tokyo and in February began reinforcing home island defenses with forces from front line units. See also Fuchida, p. 65-66.

⁷³ Fuchida, p. 53.

⁷⁴ This vision of Midway's future importance as a Japanese base was not shared by either the army or by the Naval General Staff. They believed that Midway would prove to be a logistically insupportable and operationally vulnerable outpost of insignificant potential to contribute to Japanese operations in the central Pacific. See Willmott, p. 69-70 for a summation of the Naval General Staff's arguments against Midway's status as a strategic asset.

⁷⁵ Fuchida, p. 71. See also Willmott, p. 118-119. The gulf of time and culture that separates us today from the Japanese leadership of 1942 makes it difficult to appreciate the psychological impact of the Doolittle Raid. The military was stung by the humiliation and embarrassment of their failure to protect the nation and its Emperor. The visceral reaction to the raid was to insist on immediate action to end this threat. Significantly, some of the opposition to the Combined Fleets plans which was indirectly subdued by LTC Doolittle came from within the Imperial Navy's leadership.

⁷⁶ Willmott, p. 118-119. Willmott goes on to describe the Midway plan that emerged from the Combined Fleet's efforts as "flawed by inconsistencies and contradictions." Earlier, [p. 78], he comments on the plan's problems; "And there was no way the incoherence could be dispelled: the authors of the plan considered themselves beyond advice and criticism."

ENDNOTES

⁷⁷ Willmott, p. 117. Their reticence can be attributed largely to cultural factors. Within the navy there was at this time a growing wave of arrogant and self-deluding "victory disease" which blinded its afflicted to military rationality. Even officers not so infected were reluctant to speak out to oppose the will of their supremely respected CinC, Admiral Yamamoto. See also Willmott p. 78 and Fuchida, p. 91-94.

⁷⁸ The consideration of Midway planning as two distinct phases is for the convenience of this study and are the invention of the author. Japanese planners did not identify these phases. In fact, planning was nearly continuous from January through execution of the Midway plan when the fleet sortied from its anchorages. Although Midway was approved by the Imperial General Headquarters on 5 April, the orders to the Combined Fleet were not formally issued until 5 May. See also Capt Robert Rubel, *The Art of Operational Military Planning*, (US Naval War College Course Material), Newport, RI: Naval War College, 1995 for a discussion of operational planning methods and their pitfalls.

⁷⁹ These are the desired goals and attributes of effective wargaming as described in current United States military doctrine, particularly US Army ST 101-5, *Command and Staff Decision Process*, Ft. Leavenworth, KS: USACGSC, FEB 96, p. 4-1; and Milan Vego, *The Commander's Estimate*, (US Naval War College Course Material), Newport, RI: Naval War College, 1996. The notion that these were the goals and attributes of the Midway wargames is based on the conduct of similar wargames prior to the Pearl Harbor raid. Prados [p. 139-141] discusses these wargames and indicates a more open dialogue between participants followed by more intense staff work and personal reflection. However, these games were overshadowed by Admiral Yamamoto's intense desire to execute the operation -- a pattern repeated in preparation for Midway.

⁸⁰ Fuchida, p. 93-94. Fuchida also points out that the commanders had little time to study the plan and that they were therefore forced to "...play out their parts like puppets, with the staff of Combined Fleet Headquarters pulling the strings." [p. 96]. Ugaki [p. 120] observes "Although some forces haven't enough time to make ready, we have decided to carry it out as originally planned..." See especially Willmott' p. 111-116. Willmott's more dispassionate recounting of these wargames strongly echoes Fuchida's comments. Based on this evidence one has to wonder why the Combined Fleet even bothered to conduct the wargames.

⁸¹ Willmott, p. 111.

⁸² Ugaki, p. 118. Ugaki records his positions for day one of the maneuvers as "...superintendent, chief judge, and commander in chief of the Blue Force all in one."

⁸³ Willmott, p. 111.

ENDNOTES

⁸⁴ This fantastic episode is recorded in Fuchida, p. 96; Willmott p. 111; and Prados, p. 313-314. In a bit of supreme irony, Ugaki comments on 7 May [p. 122] after hearing reports of losses in the Coral Sea "A dream of great success has been shattered. There is an opponent in a war so one cannot progress just as one wishes." [!]

⁸⁵ Prange, p. 370-371. Fuchida says it was a "malady of overconfidence"; p. 245-247. Ienaga touches indirectly on victory disease, p. 142-143.

⁸⁶ Fuchida, p. 99 and 105-106. Even the material results and tactical lessons learned from the Battle of the Coral Sea, (5-7 May), failed to effect the Midway planning. The rigid inflexibility of Japanese planning for Midway is evidenced by the Combined Fleet's refusal to alter the campaign's time table. Instead of pursuing the capture of Port Moresby by Carrier Division 5 and Cruiser Division 5, these forces were recalled to participate in the Midway operation and operations against Port Moresby were postponed. However, battle damage and aircrew losses would prevent carriers *Zuikaku* or *Shokaku* from participating in Midway. This reduced the striking power of the Midway carrier forces by one third, but no changes were made to either the Midway plan or to the Solomons sequels within the campaign. Ugaki's diary entries are full of information about Coral Sea right up until the fleet sails for Midway, yet he records no mental reservations or even considerations of the effect of Coral Sea on Midway; Ugaki p. 121-127.

⁸⁷ The material in this operational overview is drawn primarily from: Fuchida, Willmott, Palmer, LTC Peter J. *Operational Main Effort and Campaign Planning*. (SAMS Monograph), Ft. Leavenworth, KS: USACGSC, 1991, and Matheny, COL Michael. *Midway: A Case Study in the Role of Major Operations in a Maritime Strategy*. (Student Paper), Newport, RI: Naval War College, 1995. Descriptive terminology (main effort, operational deception, etc.) is taken from current United States doctrine.

⁸⁸ The Fourth Fleet eventually ordered RY suspended after US Navy submarine S-42 sank the *Okinoshima*, flagship of the invasion forces, with two torpedos during the night of 10/11 May near Rabaul. Ugaki, p. 125.

⁸⁹ From the Aleutians to the Gilberts is roughly 4,100 Nautical miles; from Hawaii to Honshu 3,900 Nautical miles. Fuchida, p. 86 states the MI/AL deployment against the US Pacific Fleet as Yamamoto (Main Body) 600 miles northwest of Midway, Takasu (Screening Force) 500 miles north of Main Body, Nagumo (1st Carrier Striking Force) 300 miles east of Main Body, Kakuta (2d Carrier Striking Force) 300 miles east of Screening Force. Fuchida was a severe post-war critic of this dispersion (See p. 233).

⁹⁰ The decisive battle against the US Navy in 1942 was to be a classic surface to surface engagement by battleships and heavy cruisers pounding each other with heavy cannons and torpedoes in the tradition of Nelson and Mahan. These traditional surface combatants would be supported by the carriers in a screening and advanced guard role.

ENDNOTES

See Fuchida p. 90, and Dull, p. 138. The Imperial Japanese Navy Battle Instructions of 1934 stated "The decisive battle is the essential task of warfare, and for this reason warfare should always be based on the decisive battle." This is taken from Matheny, p. 1. (His citation reads David C. Evans, trans. *Imperial Japanese Navy Battle Instructions*; translated from *Kaigun daigaku Kyaiku*, Tokyo, Japan: Kojinsha, 1978, p. 8.)

⁹¹ MI's extraordinary submarine and submarine-aviation reconnaissance efforts were required because of the miserable state of Japanese naval intelligence organization and operations which had no idea where the American carriers were either during the planning or at the beginning of Operation MI. See Prados, p. 483-484. Prados quotes the senior intelligence analyst for the Imperial Combined Fleet, Commander Nakajima, who observed, "The whole system was weak." [p. 484]. This is an incredible understatement since the system was in fact abysmal. The amount of information flowing in was high, but the number and quality of analysts was always very low. Two passages are illuminating: "...Nakajima often made specific requests for aerial reconnaissance. He found they were only sometimes complied with, and mission photos rarely reached him. There were no photo interpreters assigned to the fleet intelligence staff. ... In fact for several months there was no one at all on the intelligence staff. Commander Nakajima did a one man job. He did not produce daily summaries ... there was no situation plot, there were few written records of any kind." [p. 483]. See also Fuchida p. 232-233. These two senior officers endorse Prados' view and blame the Naval General Staff for "...bad and ineffective functioning of Japanese intelligence...illustrated by ... [their] ... persistent misestimate [sic]..." [p. 232].

⁹² Operation K was an interesting episode in the Pacific War... This mission was rehearsed on 4 March from Wotje to French Frigate Shoals where two huge 31-ton 4,000 mile range Type-2 Kawanishi flying boats refueled and then proceeded to conduct an armed night reconnaissance of Pearl Harbor. After dropping bombs on Hawaii, (the bombs struck a hillside and damaged nothing) the aircraft recovered to Wotje. "K" reconnaissance missions of Midway and Johnston Island were continued for several days. See Prados, p. 281-284 and Fuchida 87-89.

⁹³ From a lecture to officers at Aldershot, 1930. Tsouras, p. 202.

⁹⁴ From *Thoughts on War*, 1944. Cited in Heinl, p. 149

⁹⁵ Ugaki, p. 75.

⁹⁶ Joint Pub 3-0, p. III-21. Doctrine states "To the extent possible, ...attack enemy centers of gravity directly."

⁹⁷ See Fuchida, p. 240-242. Fuchida entitles this section as "The Myth of the Almighty Battleship" and derides the Japanese navy's hidebound "battleship admirals." The US Navy also contained many battleship admirals, but the heavy attrition of

ENDNOTES

battleships on December 7th made the carriers the *de facto* American capital ships. This is fortunate in another respect. Until the introduction of the *Iowa*-, *North Carolina*-, and *South Dakota*-Class battleships in 1943 and 1944, the Japanese battlewagons outclassed their American counterparts. It is very likely that a 1942 fleet-to-fleet engagement between the battleships of two navies would have been decided in favor of the Japanese.

⁹⁸ Joint Pub 5-00.1, p. II-16.

⁹⁹ The arguments against Operation MI based on operational reach are discussed extensively in Willmott, p. 68-71. A succinct summary of these same key points is in Fuchida, p. 58. Of the six points of opposition reviewed by Fuchida, four are directly related to operational reach.

¹⁰⁰ Prange, p. 442-443. *Akagi* and *Tone* began antiaircraft fire at 0708. At 1050 Nagumo radioed that fires were raging on *Kaga*, *Soryu*, and *Akagi*. Dispersion is the antithesis of mass and concentration which had been hallmarks of successful naval tactics for over 100 years; according to Mahan. See Fuchida, p. 233-234 for a thorough discussion of the perils and impact of the Japanese dispersion at Midway.

¹⁰¹ Fuchida, p. 98; states "...the Midway plan rested on the obsolete concept, still dominant in the Combined Fleet Headquarters, that battleships rather than carriers constituted the main battle strength of the fleet." Prange [p. 89] quotes Yamamoto in the aftermath of Pearl Harbor as "The battleship constitutes the nucleus of naval power."

¹⁰² Japan had the resources to form two such fleets immediately and the third could have been established by the end of the year. The Combined Fleet agreed in principle to this surprising recommendation, but took no action before Midway. After Midway losses prevented its implementation. See Fuchida, p.99

¹⁰³ See Willmott, p. 114-115.

¹⁰⁴ Basing plans on a rigidly predictable enemy whom the Japanese would surprise, while not themselves being surprised in return, was a persistent flaw in Japanese planning in World War Two. Fuchida observes "...the Midway planners seemed to work entirely on the basis of what the enemy would *probably* do, rather than what he might possibly do or what he was capable of doing." [p. 245][italics in the original]. Willmott addresses this issue in relation to the US Navy carrier raids; "...the main assumption underpinning the whole concept of Japanese operations was flawed. The assumption ... was that the Japanese would be able to dictate the operational pattern of the war and ... the enemy would have to conform to it..." [p. 56].

¹⁰⁵ Willmott, p. 111-112. In this passage, Willmott describes the mild efforts to stimulate discussion of branches to the plan, at the tactical level, by Yamamoto and Admiral Kusaka, CofS 1st Carrier Striking Force. Their questions and concerns were

ENDNOTES

essentially wished away and ignored. Moreover, as is mentioned elsewhere, Ugaki's performance as umpire neutralized any sincere attempts at realism and rationality.

¹⁰⁶ Tsouras, p. 256, paraphrased. This quotation is from *The Rommel Papers*. The cited page reads "...most of the principles for himself..." This paper uses "problems" to improve clarity.

¹⁰⁷ Tsouras, p. 253. The cited passage is from *Skirmishing* written in 969 CE; taken from Dennis' 1985 *Three Byzantine Military Treatises*. Nikephorus was an Eastern Roman Emporer known as "White Death" to the Muslims. A brilliant general; he instilled new discipline and organizational rigor into the decaying Byzantine army and reconquered Crete, Cilicia, and most of modern-day Syria for the Empire.

BIBLIOGRAPHY

BOOKS

- Clausewitz, Major-General Carl von. *On War*. Michael Howard and Peter Paret, ed. and trans., Princeton, JN: Princeton University Press, 1976.
- Costello, John. *The Pacific War*. New York, NY: Quill, 1982.
- Drea, Edward J. *MacArthur's ULTRA: Codebreaking and the War Against Japan*. Lawrence, KS: University of Kansas Press, 1992.
- Dull, Paul S. *A Battle History of the Imperial Japanese Navy (1941-1945)*. Annapolis, MD: United States Naval Institute Press, 1978.
- Evans, Dr. David C., ed. and trans. *The Japanese Navy in World War II in the Words of Former Japanese Naval Officers*. Annapolis, MD: United States Naval Institute Press, 1986.
- Fuchida, Captain Mitsuo and Commander Masatake Okumiya. *Midway: The Battle that Doomed Japan*. Annapolis, MD: United States Naval Institute Press, 1955.
- Howard, Michael. "The Use and Abuse of Military History" in *The Causes of War and Other Essays*. Cambridge, MA: Harvard University Press, 1983.
- Hoyt, Edwin P. *Japan's War: The Great Pacific Conflict - 1853 to 1952*. New York, NY: McGraw-Hill Book Co., 1990.
- Ienaga, Saburo. *The Pacific War 1931-1945*. Anonymous trans. New York, NY: Pantheon Books, 1978.
- Ito, Mansanori. *The End of the Imperial Japanese Navy*. Andrew Y. Kuroda and Roger Pineau, trans., New York, NY: W. W. Norton and Co., 1962.
- James, D. Clayton, "American and Japanese Strategies in the Pacific War" in *Makers of Modern Strategy: From Machiavelli to the Nuclear Age*, Peter Paret, ed. Princeton, NJ: Princeton University Press, 1986
- Jomini, General Baron Antoine. *Summary of the Art of War*. BG J. D. Hittle, trans. and ed. In *Roots of Strategy - Book 2*. Harrisburg, PA: Stackpole Books, 1987.
- Morrison, Samuel Elliot. *The Rising Sun in the Pacific 1931-April 1942. History of the United States Navy in World War Two*, Volume III. Boston, MA: Little, Brown, and Co., 1984.
- Morrison, Samuel Elliot. *Coral Sea, Midway, and Submarine Actions May 42-August 42. History of the United States Navy in World War Two*, Volume IV. Boston, MA: Little, Brown, and Co., 1984.

BIBLIOGRAPHY

- Prados, John. *Combined Fleet Decoded: The Secret History of American Intelligence and the Japanese Navy in World War II*. New York, NY: Random House, 1995.
- Prange, Gordon W. *Miracle at Midway*. With Donald M. Goldstein and Katherine V. Dillon, New York, NY: McGraw-Hill, 1982.
- Sadkovich, James J., ed. *Reevaluating the Major Naval Combatants of World War II*. New York, NY: Greenwood Press, 1990.
- Sun Tzu, *The Art of War*, Ralph D. Sawyer, trans. Boulder, CO: Westview Press, Inc., 1994.
- Ugaki, Admiral Matome. *Fading Victory: The Diary of Admiral Matome Ugaki 1941-1945*. Masataka Chihaya, trans. Pittsburgh, PA: University of Pittsburgh Press, 1991.
- Willmott, H. P. *The Barrier and the Javelin: Japanese and Allied Pacific Strategies, February to June 1942*. Annapolis, MD: United States Naval Institute Press, 1983.

GOVERNMENT PUBLICATIONS

- HQ Army Forces Far East. Japanese Monograph No. 88 *Aleutian Naval Operations March 1942 - February 1943*. Tokyo, Japan: HQ Army Forces Far East, 1953.
- HQ Army Forces Far East. Japanese Monograph No. 147 *(Japanese) Political Strategy Prior to the Outbreak of War (Part III) (Draft)*. Tokyo, Japan: HQ Army Forces Far East, 1953.
- HQ Army Forces Far East. Japanese Monograph No. 152 *Political Strategy Prior to the Outbreak of War Part V*. Tokyo, Japan: HQ Army Forces Far East, 1953.
- Joint Chiefs of Staff. Joint Pub 1 *Joint Warfare of the United States Armed Forces*. Washington, DC: JCS, 1991.
- Joint Chiefs of Staff. Joint Pub 3-0 *Doctrine for Joint Operations*. Washington, DC: JCS, 1995.
- Joint Chiefs of Staff. Joint Pub 5-0 *Doctrine for Planning Joint Operations*. Washington, DC: JCS, 1995.
- Joint Chiefs of Staff. Joint Pub 5-00.1 *Doctrine for Joint Campaign Planning*, (Initial draft). Washington, DC: JCS, 1992.
- US Army. FM 100-7 *Decisive Force: The Army in Theater Operations*. Washinton, DC: HQ Department of the Army.

BIBLIOGRAPHY

US Army. ST 101-5 *Command and Staff Decision Process*. Ft. Leavenworth, KS: USACGSC, 1996.

MANUSCRIPTS/STUDENT PAPERS

Bates, Richard W. *The Battle of Midway, Including the Aleutian Phase, June 3 to June 14, 1942. Strategic and Tactical Analysis*. Newport RI: Naval War College, 1948.

Heredia, LTC Michael D. *Building a Campaign: The Essential Elements of Operational Design*. (SAMS Monograph), Ft. Leavenworth, KS: USACGSC, 1994.

Johnson, MAJ John D. *Sequencing Operations: Considerations for the Operational Planner*. (SAMS Monograph). Ft. Leavenworth, KS: USACGSC, 1991.

Massinon, MAJ Anton E. *Course of Action development in Campaign Planning*. (SAMS Monograph), Ft. Leavenworth, KS: USACGSC, 1994.

Matheny, COL Michael. *Midway: A Case Study in the Role of Major Operations in a Maritime Strategy*. (Student Paper), Newport, RI: Naval war College, 1995

Mendel, COL William W. and LTC Floyd T. Banks Jr. *Campaign Planning*. Carlisle Barracks, PA: US Army War College, 1988.

Palmer, MAJ Peter J. *Operational Main Effort and Campaign Planning*. (SAMS Monograph), Ft. Leavenworth, KS: USACGSC, 1991.

Rubel, Capt Robert. *The Art of Operational Military Planning*, (US Naval War College Course Material), Newport, RI: Naval War College, 1995.

Schneider, Dr. James J. Theoretical Paper No. 3 *The Theory of operational Art*. Ft. Leavenworth, KS: USACGSC, 1988.

Schneider, Dr. James J. Theoretical Paper No. 5 *The Eye of Minerva: The Origin, Nature, and Purpose of Military Theory and Doctrine*. Ft. Leavenworth, KS: USACGSC, 1986.

Vego, Milan. *Campaign Planning*. (Unpublished Course Materials), Newport, RI: Naval War College, 1995.

Vego, Milan N., *Fundamentals of Operational Art: A Glossary of Terms and Their Definitions*. (Initial Draft), Newport, RI: Naval War College, 1994.

Vego, Milan. *Fundamentals of Operational Design*. (Unpublished text material) Newport, RI: US Naval War College, 1995.

BIBLIOGRAPHY

Vego, Milan. *The Commander's Estimate*, (US Naval War College Course Material), Newport, RI: Naval War College, 1996.

Walker, MAJ James W. USAF. *The Battle of Midway*. Maxwell AFB, AL: ACSC/EDCC, 1984

JOURNAL ARTICLES

Barnhart, Michael A "Japan's Economic Security and the Origins of the Pacific War," *Journal of Strategic Studies*, Vol 4, No. 2, June 1981: 105-124

Rampy, Michael R. "Campaign Planning: Paradox or Paradigm" *Military Review*. August, 1990: 42-46.

MAPS/ATLAS'

Griess, Thomas E., ed. West Point Military History Series *Atlas for the Second World War -- Asia and the Pacific*. Wayne, NJ: Avery Publishing Group Inc., 1985.

Map, World Plotting Series, 1:18,000,000 *Oceania* Sheet 5, Series 1147, Edition 2, DMA, Washington, DC, 8-81.

Map Supplement "Pacific Ocean, Atlas plate 61," *National Geographic Magazine*. Washington, DC: National Geographic Society, April, 1962.

DICTIONARIES

Heinl, COL Robert Debs jr., USMC, ed. *Dictionary of Military and Naval Quotations*. Annapolis, MD: United States Naval Institute Press, 1966.

Tsouras, Peter G., ed. *Warrior's Words: A Quotation Book From Sesostris III to Schwarzkopf 1871 BC to AD 1991*. London: UK, Cassel, 1992.